



Hilcorp plans Cook Inlet seismic, exploration over next five years

Potential Hilcorp Alaska Cook Inlet exploration and development plans for the next five years are listed in an application the company filed with the National Marine Fisheries Service for an incidental take authorization.

Work covered under the application ranges from seismic and exploration drilling to maintenance activities on the company's existing infrastructure.

The earliest activities described are in federal outer continental shelf waters in lower Cook Inlet: a 3-D seismic survey planned for April through June of 2019, followed by an OCS geohazard survey in the fall of 2019 or the spring of 2020. That work would be preparatory to OCS exploratory wells to be drilled April through October of 2020-22.

see HILCORP PLANS page 6

Conoco's Hirshberg retiring; Fox to be EVP, COO, Walette, EVP, CFO

ConocoPhillips said Oct. 31 that Al Hirshberg is retiring as executive vice president, production, drilling and projects, after more than 35 years in the industry, including eight years with ConocoPhillips.

In conjunction with this retirement, the company is realigning executive leadership responsibilities.

Matt Fox, currently executive vice president, strategy, exploration and technology, will be named executive vice president and chief operating officer, with responsibility for worldwide exploration and production operations, corporate planning and technology. Fox has more than 30 years of industry experience in a broad range of technical and leadership roles, including leading ConocoPhillips' exploration and

see CONOCO LEADERSHIP page 10

IEA report catalogues risks faced by countries dependent on crude

A new report, published by the International Energy Agency and titled "Outlook for Producer Economies 2018," examines the challenges faced by countries with economies dependent on oil production and makes recommendations for how those countries may respond to those challenges. The report comments on how the rollercoaster ride of oil prices in recent years has exposed the structural weaknesses in the economies of many of the major oil producers. And the report recommends that these countries reform their economies, maintaining their hydrocarbon industries while also finding ways of extracting value from hydrocarbon products and diversifying into areas such as natural gas production, renew-

see IEA REPORT page 10

Rail to the rescue; Alberta premier urges more tanker car purchases

Alberta Premier Rachel Notley is calling for an "extraordinary intervention" by the Canadian government to purchase new locomotives and at least 200 tanker cars to get stranded heavy crude to port in Vancouver for shipment to Asia.

She told reporters that "tens of millions of dollars extra are being pulled out of the Canadian economy because we can't get our act together to get our product to market," referring to the freeze in new pipeline construction.



RACHEL NOTLEY

see RAIL RESCUE page 10

UTILITIES

Chasing parallel paths

IGU board agrees to MOU with Siemens; also moving on Titan expansion FEED

By ALAN BAILEY
Petroleum News

During a work session on Oct. 23 the board of the Interior Gas Utility passed a resolution endorsing a memorandum of understanding with industrial company Siemens for an investigation into the development of a new liquefied natural gas plant near Houston, on the Alaska Railroad. During the same session the board also discussed how to move towards the commissioning of front-end engineering and design for the expansion of the Titan LNG plant near Point Mackenzie.

The overall objective is to expand the supply of LNG for the city of Fairbanks and its surrounds, as part of the Interior Energy Project, an Alaska

Assuming that the term sheet is signed by the end of this year, that would lead to a firm price for the Knik/Siemens LNG by June 1.

Industrial Development and Export Authority sponsored project designed to bring an expanded supply of affordable natural gas to the Fairbanks region.

The IGU board seeks clarification of the cost of LNG that would come from Siemens' proposed Houston plant, and refinement of the estimated cost of the Titan expansion. That could then enable

see PARALLEL PATHS page 11

EXPLORATION & PRODUCTION

GMT-2 development a go

ConocoPhillips sanctions development; reports increased Alaska income

By ALAN BAILEY
Petroleum News

Following a federal record of decision, allowing ConocoPhillips to proceed with its proposed Greater Mooses Tooth 2 development in the northeastern National Petroleum Reserve-Alaska, the ConocoPhillips board has sanctioned the project. On Oct. 25 the company announced that a final investment decision had been made, enabling the GMT-2 project to proceed.

Increased earnings

The announcement coincided with the company's publication of its results for the third quarter of this year, results which reflect a positive situa-

The GMT-2 development, to which ConocoPhillips has now committed, is the latest of a series of step-out developments from the Colville River delta west into the NPR-A.

tion for the company in Alaska. The company reported that its third quarter adjusted earnings in Alaska had increased from \$103 million in 2017 to \$427 million in 2018. Earnings for the first nine months of the year increased from \$291 million to \$1.3 billion. Those results came in the context of a similar uptick of ConocoPhillips' worldwide earn-

see GMT-2 DEVELOPMENT page 8

NATURAL GAS

Canadian gas eyes rebound

Analysts, industry leaders downplay hopes of short-term gas price revival

By GARY PARK
For Petroleum News

Natural gas was leader of the Canadian petroleum pack through most of the 1990s and the first decade of the current century and looked set for a sustained run as proposed LNG projects piled up.

Not any more, with only a handful of LNG plans remaining active, capital spending beaten back by shale gas activity in the U.S. and commodity prices forecast to fall from a predicted C\$3 per thousand cubic feet to under C\$1.60 in 2019 and Bank of America Merrill Lynch warning the slide could dip under C\$1 in 2020.

Encana was once the largest gas producer in North America and briefly held the largest market

Greg Colman, National Bank Financial analyst, said in a research note that LNG development tends to occur in waves rather than isolation because "if the economics make sense for one project, they make sense for many."

capitalization on the Toronto Stock Exchange.

It was so confident in the outlook for gas that it spun off its oil sands holdings into Cenovus Energy, a move it came to rue, eventually forcing it to embark on a steady rebuilding of liquid holdings.

Given that history, it's understandable that key

see PRICE REVIVAL page 8

• UTILITIES

Action on electricity cybersecurity

An Alaska Railbelt working group progresses towards a set of standards for application in the regional electrical network

By ALAN BAILEY
Petroleum News

During an Oct. 24 public meeting of the Regulatory Commission of Alaska electricity utility executives reported on progress towards developing a set of cybersecurity standards for application in the Alaska Railbelt electrical system.

Cybersecurity, involving protection of computer and digital communications systems from malicious attacks involving the planting of malware in the systems, has become a very serious issue, given society's increasing dependence on the use of computer-based data processing, automation and communication. And, in the electricity industry, a cyberattack has the potential to bring down all or part of an electricity supply network, with dire results.

The electricity utilities that operate in the Alaska Railbelt are well aware of cybersecurity risks and have been taking steps to guard against any malware attack.

Following a further review of the standards by the working group in November, the group will submit the draft standards to the Railbelt utility managers for review, with the expectation of final completion of the standards in February, McCarty said.

And for several years a group from the utilities has been working jointly on cybersecurity.

Railbelt reliability standards

The RCA, as part of its interest in seeing a more unified approach to the operation of the Railbelt grid, has seen the implementation of a single enforced set of reliability standards for the entire grid as a critically important issue. The utilities have made considerable progress in unifying the standards that they use. But those stan-

dards do not yet incorporate cybersecurity. However, during the Oct. 24 public meeting utility executives told the commission that the cybersecurity working group anticipates completing a set of cybersecurity standards within a few months.

Jeff Myers, senior manager of information technology at Matanuska Electric Association, told the commission that the group had been engaging consultants to help with the development of standards. The group has been determining how to configure national cybersecurity standards, known as CIP standards, to fit into the Railbelt's unique circumstances. In an August workshop the group developed a draft set of security criteria to apply to high voltage electrical generation and transmission in the Railbelt. And in an October workshop the group had used the CIP standards to develop a draft set of Alaska standards for this high voltage, so called "bulk," system for the generation and regional transmission of power.

see CYBERSECURITY page 3

contents

Petroleum News

Alaska's source for oil and gas news

ON THE COVER

Chasing parallel paths

IGU board agrees to Siemens MOU; moving on Titan FEED

GMT-2 development a go

Conoco sanctions development; reports increased Alaska income

Canadian gas eyes rebound

Industry leaders downplay hopes of short-term gas price revival

Hilcorp plans Cook Inlet seismic, exploration over next five years

Conoco's Hirshberg retiring; Fox to be EVP, COO, Walette, EVP, CFO

IEA report catalogues risks faced by countries dependent on crude

Rail to the rescue; Alberta premier urges more tanker car purchases

ALTERNATIVE ENERGY

7 Buckland's solar arrays set for operation

ENVIRONMENT & SAFETY

4 Experts needed for CI pipeline assessment

EXPLORATION & PRODUCTION

3 State approves West Sak expansion project

4 National drilling rig count up 1 to 1,068

FACILITIES

5 NSB applies for new gravel mine site

GOVERNMENT

4 WY watching CO's anti-fracking issue

PIPELINES & DOWNSTREAM

3 Ollitok Pipeline again transporting NGLs

4 Chevron agrees to \$160M upgrade, fines

UTILITIES

2 **Action on electricity cybersecurity**

An Alaska Railbelt working group progresses towards a set of standards for application in the regional electrical network



To advertise: Contact Susan Crane
at 907.770.5592

Maritime Helicopters

HOMER
DUTCH HARBOR
FAIRBANKS
KODIAK
KENAI
PRUDHOE BAY
VALDEZ



(907) 235-7771 • www.maritimehelicopters.com • info@maritimehelicopters.com

• EXPLORATION & PRODUCTION

State approves West Sak expansion project

PETROLEUM NEWS

The Alaska Department of Natural Resources, Division of Oil and Gas, has approved a proposal from ConocoPhillips Alaska for expansion of drill site 3R in the Kuparuk River unit as part of the West Sak expansion project.

This is an amendment to the Kuparuk River unit plan of operations.

ConocoPhillips requested authorization for placement of gravel to expand the DS-3R pad at Kuparuk to the north access road and expand the existing access road crown width of some 32 feet, the division said. This will involve placement of some 27,740 cubic yards of gravel within the existing pad footprint to raise and expand portions of the pad to provide access to existing and future infrastructure.

Some 740 cubic yards of gravel will be placed along the north access road to expand the crown width; some 0.07 acres of tundra will be impacted, the division said.

The project also involves removal of the existing culvert beneath the north access road. That culvert will be replaced, the division said, "with a new culvert consistent with current CPAI specifications."

Trenching will also be required to connect a power pole at the east end of the pad.

Construction activities will begin, the division said, upon receipt of authorization and will be completed by Nov. 30, 2019.

Drill site 3R is on the northern edge of the Kuparuk River unit, between the Oliktok Dock and the Oliktok Point staging area in section 9, township 13 north, range 9 east, Umiat Meridian.

Conditions and stipulations

The division is requiring a status report for these activities on May 1 and Nov. 1 of each year from approval until a completion report is filed.

The DNR commissioner may require

Some 740 cubic yards of gravel will be placed along the north access road to expand the crown width; some 0.07 acres of tundra will be impacted, the division said.

an authorized representative to be on site during operations, ensuring that the Division of Oil and Gas and the Division of Mining, Land and Water meet statutory responsibilities for monitoring activities on state-owned lands.

Tundra travel on or across Native lands claims is not authorized.

The division requires a certified as-built survey within one year of placement of the improvement.

KIC equipment tent

In another recent Kuparuk plan of operations amendment, the division approved a proposal from ConocoPhillips to install a new 100 feet by 50 feet equipment tent and excavate a trench on the Kuparuk Industrial Center pad in the unit. The trench will be used to run powerlines from the C washbay to the equipment tent; it will measure some 225 feet long, 12 feet wide and 4 feet deep and will be backfilled with material from the excavation.

Prior to installation of the new equipment tent some 185 yards of gravel at about 12 inches deep will be excavated at the tent location, a liner and insulation placed and the excavated gravel replaced.

The division said all work would be performed on-pad with construction equipment including an excavator and skid-steer loader.

Project work is expected to begin in October and be completed by December.

A certified as-built survey will be required within one year of placement of the improvement.

The KIC is northeast of Kuparuk Central Processing Facility 1. ●

continued from page 2

CYBERSECURITY

Steps to implementation

Todd McCarty, senior manager for information technology at Chugach Electric Association, said that as a next step the operating committee for the Alaska Railbelt transmission system intertie is comparing the terminology used in the draft cybersecurity standards with the terminology used in a draft set of physical security standards for the system, to come up with a single glossary of terms. Then all of the utilities will review the standards, to assess the cost of compliance and the staffing implications.

Following a further review of the standards by the working group in November, the group will submit the draft standards to the Railbelt utility managers for review, with the expectation of final completion of the standards in February, McCarty said.

Distribution system security

Commissioner Robert Pickett asked if any consideration is being given to cybersecurity for the local distribution aspects of the electrical system, rather than just the high voltage bulk generation and transmission system. With a plethora of new equipment, such as smart metering, coming into play, security of the distribution system is becoming an increasing concern, he suggested.

McCarty said that there has been much discussion on this topic. Even large utilities are trying to figure out how to deal with existing gear and how

Commissioner Robert Pickett asked if any consideration is being given to cybersecurity for the local distribution aspects of the electrical system, rather than just the high voltage bulk generation and transmission system.

to make equipment secure, he said. Ed Jenkin, director of power delivery for Matanuska Electric Association, commented that there are components of the distribution networks that can impact overall system reliability. The standards development has focused on the higher-voltage system components, but there has been consideration of areas where it may be necessary to reach down into lower voltage components, Jenkin said.

Myers and McCarty also commented that the utilities have been implementing infrastructure security recommendations from the Federal Energy Regulatory Commission and the U.S. Department of Homeland Security. They also commented that, with cybersecurity being a moving target, as information technology and the nature of cyberattacks changes, it is necessary to remain agile in protecting the electrical systems.

Pickett suggested that cybersecurity considerations should potentially extend to issues involving third parties such as natural gas suppliers that are critically important to the reliability of Railbelt electricity supplies. ●

Contact Alan Bailey at abailey@petroleumnews.com

IN AN INDUSTRY OF EXPLORERS
WE ARE THE GUIDES

- Oil and Gas Exploration • ALTA/ACSM Surveys • 3-D Laser Scanning
- Planning & Permitting • Utility and Drainage Projects
- Commercial and Residential Site Development
- Traffic Engineering • Statewide Service

experience you can use
ESTABLISHED 1949

LOUNSBURY & ASSOCIATES
Surveyors • Engineers • Planners
www.lounsburyinc.com

SUBSCRIBE
to *Petroleum News*

Don't miss another issue, call: **907 522.9469**

LAW OFFICES OF
Guess & Rudd
ESTABLISHED 1961 P.C.

SERVING THE LEGAL NEEDS OF ALASKA'S OIL INDUSTRY FOR OVER 50 YEARS

OIL & GAS • COMMERCIAL • ENVIRONMENTAL
EMPLOYMENT • INSURANCE • MINING
TIMBER • ALASKA NATIVE LAW • PIPELINES
ADMINISTRATIVE LAW AND LITIGATION

1029 W 3RD AVENUE, SUITE 400
ANCHORAGE, AK 99501
PHONE: 907-793-2200 • FAX: 907-793-2299
www.guessrudd.com

korbana
Protective Apparel

- Designed for Alaska's North Slope
- Unbeatable Quality
- Mens & Womens FRC
- Superior Technology
- Preferred Comfort
- Market-Proven Performance
- Designed in Anchorage Built in Kentucky
- NFPA 2112 Certified Fabrics

Alaska Textiles
WHEN IT COMES TO SAFETY...
THE PROVIDER MATTERS

- Alaska's Largest FRC Inventory
- 30,000+ Items Ready for Quick Ship
- Industry Leader
- Proven Performance

THAT'S WHY SO MANY COMPANIES CHOOSE ALASKA TEXTILES FOR THEIR FRC NEEDS
alaskatextiles.com (907) 265 - 4880

Workrite Flame Resistant Leadership
DRAGONWEAR
korbana Protective Apparel
BIGBILL FR PROTECTIVE APPAREL
korbana.com Made in U.S.A.

ENVIRONMENT & SAFETY

Experts needed for CI pipeline assessment

Cook Inlet Regional Citizens Advisory Council and the Alaska Department of Environmental Conservation are seeking volunteers with appropriate expertise to participate in a panel to make risk mitigation recommendations for pipelines in Cook Inlet. The panel is required as part of a pipeline integrity assessment for Cook Inlet pipelines that carry oil, that carry natural gas in association with oil production or that have been abandoned.

The goal of the assessment is to ensure the continued safe operation of the Cook Inlet oil and gas pipeline infrastructure by anticipating problems in the aging infrastructure. The assessment is expected to result in the implementation of risk reduction measures, to prevent pipeline loss of integrity problems.

The panel of volunteer experts will interact with pipeline operators, regulators and members of the public, and will be presented with an inventory of loss of pipeline integrity events, and with a regulatory overview of Cook Inlet pipelines. The idea will be to establish common causes, frequencies and trends of pipeline failures, and to make recommendations on risk reduction measures. Possibilities for recommendations include operational best practices, proposals for further investigation, regulatory changes, information gathering and infrastructure changes.

Five panelists are needed. Potential panelists should apply to ADEC, providing information about their interest in the project, relevant expertise and any perceived conflicts of interest. The panel activities are expected to begin in May and last through October 2019.

—ALAN BAILEY

GOVERNMENT

WY watching CO's anti-fracking issue

ASSOCIATED PRESS

Energy leaders in Wyoming are closely watching the fate of a Colorado ballot initiative that would severely limit fracking on non-federal land in that state.

The Wyoming Tribune Eagle reports that Colorado-based opponents of the initiative warn it could drive jobs, capital and production northward into Wyoming.

But Wyoming industry leaders say it's way too early to say what impact the initiative could have on the Equality State's economy.

Colorado's Proposition 112 would require that new oil and gas wells be at least 2,500 feet from occupied buildings and would allow local governments to enact even greater setbacks. Current requirements are 500 feet from homes and 1,000 feet from schools.

It also would increase setbacks between new energy operations and "vulnerable areas" that include parks, creeks and irrigation canals. Current law gives the state jurisdiction over setbacks.

Denver expanding rapidly

It's the latest attempt to harness drilling in Colorado's rapidly expanding Denver metropolitan area. Previous efforts have failed, despite advocates' concerns about health and drilling rigs close to schools.

A state analysis suggests the initiative would rule out 85 percent of non-federal land in Colorado to development and drastically reduce property taxes paid by the \$32 billion state industry.

Proposition 112 is "literally a ban on new development," argued Kathleen Sgamma, president of the Western Energy Alliance, a Denver-based oil and natural gas advocacy group. "So Wyoming would probably immediately see an

increase in interest in the Powder River basin. There's already quite a lot of interest in the Powder right now."

Power River basin

The Powder River basin, which straddles the Wyoming-Montana border, is the largest coal-producing region in the U.S. and, in Wyoming, hosts oil and natural gas drilling.

"There's lots (of development) already going on in Wyoming, but if Colorado basically shuts its door to new development, I do think you'd see even more investment going into Wyoming," Sgamma said.

Wyoming could see some new investment from companies that operate in both states, said John Robitaille, vice president of the Petroleum Association of Wyoming. But the fact that more than 60 percent of minerals in Wyoming belong to the federal government raises roadblocks, he said.

"With the federal government comes various other actions that have to be taken when drilling a well, and sometimes it can be very time consuming," Robitaille said.

Mark Watson, who directs the Wyoming Oil and Gas Conservation Commission, said any companies considering leaving Colorado could go anywhere in the U.S., especially states where energy operations are on non-federal lands. Any predictions at this point, he said, are speculative.

The commission is a state regulatory agency.

"I think maybe people might make it a bigger deal than what it is, as for as it being a benefit to Wyoming," Watson said. "It will be interesting to see how people vote in Colorado and what that does with the rest of the country." ●

Full Line Steel and Aluminum Distributor Specializing in wear plate



ANCHORAGE FAIRBANKS
(907) 561-1188 (907) 456-2719

KENAI
(907) 283-3880

Visit us online at www.alaskasteel.com

Proudly featuring
HARDOX[®]
WEAR PLATE

Petroleum
NEWS

www.PetroleumNews.com

Kay Cashman	PUBLISHER & FOUNDER
Mary Mack	CEO & GENERAL MANAGER
Kristen Nelson	EDITOR-IN-CHIEF
Susan Crane	ADVERTISING DIRECTOR
Heather Yates	BOOKKEEPER
Marti Reeve	SPECIAL PUBLICATIONS DIRECTOR
Steven Merritt	PRODUCTION DIRECTOR
Alan Bailey	SENIOR STAFF WRITER
Eric Lidji	CONTRIBUTING WRITER
Gary Park	CONTRIBUTING WRITER (CANADA)
Judy Patrick Photography	CONTRACT PHOTOGRAPHER
Forrest Crane	CONTRACT PHOTOGRAPHER
Renee Garbutt	CIRCULATION MANAGER

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

NEWS
907.522.9469
publisher@petroleumnews.com

CIRCULATION
907.522.9469
circulation@petroleumnews.com

ADVERTISING
Susan Crane • 907.770.5592
scrane@petroleumnews.com

FAX FOR ALL DEPARTMENTS
907.522.9583

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



EXPLORATION & PRODUCTION

National drilling rig count up 1 to 1,068

The number of rigs drilling for oil and natural gas in the U.S. was up by one the week ending Oct. 26 to 1,068.

At this time last year there were 909 active rigs.

Houston oilfield services company Baker Hughes reported that 875 rigs targeted oil (up by two from the previous week) and 193 targeted natural gas (down one). One rig was listed as miscellaneous (up one).

Among major oil and gas producing states, Alaska and North Dakota were each up two rigs. New Mexico was up one, while California, Oklahoma, Pennsylvania and Wyoming were unchanged.

Colorado was down one; Louisiana and Texas were each down three rigs.

Baker Hughes shows Alaska with five active rigs, up two from a year ago.

The U.S. rig count peaked at 4,530 in 1981. It bottomed out in May 2016 at 404.

—PETROLEUM NEWS

Alaska's #1
Industrial Controls Representative



- Pinch Valves
- Tideflex Check Valves
- Pressure Sensors
- Expansion Joints

907.277.7555 | 1120 E. 5th Ave. Anchorage, AK

arcticcontrols.com

OWNER: Petroleum Newspapers of Alaska LLC (PNA)

Petroleum News (ISSN 1544-3612) • Vol. 23, No. 44 • Week of November 4, 2018

Published weekly. Address: 5441 Old Seward, #3, Anchorage, AK 99518

(Please mail ALL correspondence to:

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

Subscription prices in U.S. — \$118.00 1 year, \$216.00 2 years

Canada — \$206.00 1 year, \$375.00 2 years

Overseas (sent air mail) — \$240.00 1 year, \$436.00 2 years

"Periodicals postage paid at Anchorage, AK 99502-9986."

POSTMASTER: Send address changes to Petroleum News, P.O. Box 231647 Anchorage, AK 99523-1647.

FACILITIES

NSB applies for new gravel mine site

The North Slope Borough has applied to the U.S. Army Corps of Engineers for a permit to develop a new gravel mine about 25 miles east of the village of Nuiqsut, and about eight miles west of the Kuparuk base camp. The development, on the east side of Kalubik Creek, would be adjacent an existing gravel mine referred to as Mine Site F, with the new mine separately owned and operated by the borough.

The borough told the Corps that the need for more gravel for multiple new oil developments in the region necessitates the new mine site. One project in the region is Oil Search's Pikka oil field development. There needs to be sufficient gravel for the construction of facility needs such a permanent access road and operational pads, the NSB told the Corps.

The borough told the Corps that the proposed mine would eliminate the need for a separate gravel mine that has been proposed just for the Pikka development, thus reducing the wetlands impact of acquiring the gravel. The borough also told the commission that the proposed site for a gravel mine for Pikka is closer to Nuiqsut than Mine Site F.

The first phase of the proposed mine would involve excavating an approximately 1,400-foot square area. Phase two, conducted after phase one material has been depleted, would expand the western and southern borders of the mine. After eventual reclamation of the mine site, the gravel pits will slowly fill with water that can be used to construct ice roads, to supplement drilling activities, for dust control, and for watering measures in association with natural, fish-bearing lakes, the borough told the Corp.

—ALAN BAILEY

PIPELINES & DOWNSTREAM

Oliktok Pipeline again transporting NGLs

Oliktok Pipeline Co. has notified the Regulatory Commission of Alaska that on Sept. 23 it recommenced moving natural gas liquids on its pipeline.

The company is authorized to provide both natural gas and NGL transportation service. A temporary suspension of service on the line was approved in 2017 because the company had no tenders of natural gas or NGLs.

This April the company requested authorization to convert the Oliktok Pipeline from natural gas to NGL service. The line is a 16-inch 28-mile pipeline originating near Pump Station 1 on the North Slope and terminating at Kuparuk River unit Central Processing Facility 1. It began service in 1981 as the original crude line from Kuparuk to Pump Station 1; it was converted to natural gas service in the mid-1980s after a larger crude oil was built, then idled until 1995 when it began carrying NGLs. It was converted to fuel gas service in late 2014; those shipments ceased on Jan. 1, 2017, and the line was placed into suspended operations indefinitely.

Shippers then requested a return to NGL service and the line was shutdown to allow construction activities required for a return to NGL service by August, with shipments from the Prudhoe Bay unit to the Kuparuk River unit for enhanced oil recovery use.

ConocoPhillips owns Oliktok Pipeline Co. and managed the conversion work.

RCA said in August that applications for approval of connection agreements for the line had been accepted as complete.

In a Sept. 26 filing with RCA, Oliktok said it had recommenced transportation of NGLs on Sept. 23. It noted in that filing that shippers had indicated in approximately July of 2017 an interest in tendering NGLs for transportation as early as August 2018. Oliktok said it sought approval of new rules for the transportation of natural gas and NGLs and approval of rates for NGL transportation on July 17, 2018, with the tariff provisions approved by RCA effective Aug. 21.

—KRISTEN NELSON

Chevron agrees to \$160M upgrade, fines

Federal officials said Oct. 24 that Chevron Corp. has agreed to pay a nearly \$3 million fine and spend \$160 million on environmental improvements and upgrading oil refineries to resolve allegations the company violated pollution laws.

The U.S. Department of Justice said the agreement ends investigations in four states where Chevron's refineries caught fire or released harmful chemicals. The settlement calls for it to spend \$10 million on environmental projects in those four states: California, Mississippi, Utah and Hawaii.

The San Ramon, California-based company agreed to spend \$150 million upgrading refineries throughout the country.

DOJ said the \$2.95 million fine will resolve several regulatory investigations, including the 2013 explosion and fire in Pascagoula, Mississippi, that killed a Chevron worker and a 2012 fire at its Richmond, California, facility that prompted 14,000 residents to be evacuated.

"As part of this settlement, Chevron U.S.A. Inc. has agreed to significant investments at its refineries to enhance the safety and reliability of operations," company spokesman Braden Reddall said. "We believe these measures build on existing efforts to enhance safe practices at Chevron refineries."

Chevron in 2013 paid \$2 million in fines and restitution and pleaded no contest to six charges related to the Richmond fire, which sent thousands of residents to hospitals, many complaining of respiratory problems. Chevron entered the plea to charges filed by the California Attorney General's Office and the Contra Costa District Attorney's Office, including failing to correct deficiencies in equipment and failing to require the use of certain equipment to protect employees from potential harm.

It also agreed to spend \$20 million on improving the Richmond facility to settle claims made by California regulators.

—ASSOCIATED PRESS



American Marine Services Group

6000 A Street, Anchorage, AK 99518

907-562-5420

Deadhorse, AK

907-659-9010

www.amarinecorp.com • www.penco.org
alaska@amarinecorp.com



- Commercial Diving
- Marine Construction Services
- Platform Installation, Maintenance and Repair
- Pipeline Installation, Maintenance and Repair
- Underwater Certified Welding
- NDT Services
- Salvage Operations
- Vessel Support and Operations



- Environmental Services
- Oil-Spill Response, Containment and Clean-Up
- Hazardous Wastes and Contaminated Site Clean-Up and Remediation
- Petroleum Vessel Services, e.g. Fuel Transfer
- Bulk Fuel Oil Facility and Storage Tank Maintenance, Management, and Operations

Anchorage

Honolulu

Los Angeles

Committed to Alaska's Growth

Anytime, Anywhere

www.nordic-calista.com
(907) 561-7458

For Your Rig and Mobile Camp Needs

NORDIC-Calista Services

Only pay for the speed you need... Dynamic Routing!™

On time and on budget.

At Lynden, we understand that plans change but deadlines don't. That's why we proudly offer our exclusive Dynamic Routing system. Designed to work around your unique requirements, Dynamic Routing allows you to choose the mode of transportation — air, sea or land — to control the speed of your deliveries so they arrive just as they are needed. With Lynden you only pay for the speed you need!

LYNDEN
Innovative Transportation Solutions

lynden.com | 1-888-596-3361

continued from page 1

HILCORP PLANS

Also slated to begin in the spring are an Iniskin Peninsula exploration and development program which would occur in both 2019 and 2020, from April through October.

A subsea well geohazard survey in the North Cook Inlet unit is planned for 2020, followed by well abandonment activity in the unit in May-July.

Also in 2020 a Trading Bay area geohazard survey is planned, followed by Trading Bay area exploratory wells.

Listed for the entire five-year period covered by the application, 2019-24, are platform and pipeline maintenance in middle Cook Inlet, slated for April through October.

An Anchor Point 2-D seismic survey is planned for 2021 or 2022.

Drift River terminal decommissioning is slated for 2023.

Non-lethal unintentional

The application, Hilcorp said in its request, is for "the non-lethal unintentional taking of small numbers of marine mammals incidental to oil and gas explo-

ration, development, and production activities in Cook Inlet" over the five years from April 1, 2019, through April 1, 2024.

Hilcorp said it has been operating in Alaska since 2011 and has interests and operations in more than 29 oil and gas field production facilities in Cook Inlet and on the North Slope. The company also provides operational support to Harvest Alaska, a Hilcorp Alaska subsidiary, for that company's gas and oil pipelines in the Cook Inlet region.

In Cook Inlet the company's activities cover some 2.7 million acres, including land and adjacent waters in Cook Inlet — both state and federal OCS waters.

Hilcorp said that prior to its efforts to revive Cook Inlet oil and gas production, aging platform infrastructure in the inlet "was considered to be nearing its functional end of life." The company said it believes inlet facilities "have decades of economic life remaining while previous operators were actively planning infrastructure removal prior to recent investments." Hilcorp purchased assets from Chevron and Marathon in 2011 and 2012 and has also acquired XTO's Middle Ground Shoal field assets and ConocoPhillips' inlet assets including the North Cook Inlet gas field, Beluga River

gas field and Tyonek platform.

In lower Cook Inlet Hilcorp has both federal Bureau of Ocean Energy Management and state leases, acquiring 14 lease blocks in BOEM's 2017 lower Cook Inlet sale. The company has also been active in annual state leases held by the Alaska Department of Natural Resources, Division of Oil and Gas.

Anchor Point 2-D

Seismic surveys on Hilcorp's list of planned activities include a 2-D survey in the marine, intertidal and onshore area on the eastern side of Cook Inlet from Anchor Point to Kasilof, with an area of interest some five miles on each side of the coastline. Hilcorp said it anticipates the open water portion of the survey will be done in either 2020 or 2021, April through October, with the survey taking some 30 days in either year.

Hilcorp said the methods for acquiring the seismic would be similar to those employed by Apache Alaska Corp. in 2011 and 2012.

The company said a single vessel can acquire a 2-D source line in some one to two hours, with only a single line acquired in a day, allowing for node deployments and retrievals and intertidal and land zone

shot hole drilling. There are up to 10 source lines and the entire operation is estimated to take 30 days to complete, allowing for weather and equipment contingencies.

Hilcorp recently received approval from the state for a plan of operations for a two-well program at its Seaview pad near Anchor River. The company drilled shallow stratigraphic tests in the area in 2017.

3-D seismic

Hilcorp plans to collect 3-D seismic data starting April 1, 2019, over eight of the 14 OCS lease blocks it holds in lower Cook Inlet, an area of some 305 square miles including blocks 6357, 6405, 6406, 6407, 6455, 6456, 6457 and 6458. Hilcorp said it submitted an application for an incidental harassment authorization in late 2017 for a planned survey in 2018 but later withdrew it and now plans for the survey to take place in 2019, with the program anticipated to begin April 1 and last for 45-60 days through June, with the length of the survey depending on weather, equipment and marine mammal delays.

"Polarcus is the recommended seismic contractor," Hilcorp said, with the 3-D seismic acquired using a specially designed marine seismic vessel towing recording cables with a dual air gun array. There will be one source vessel, one support vessel, one or two chase vessels and potentially one mitigation vessel, with the proposed survey active 24 hours per day. There will be some five hours of data acquisition, followed by 1.5 hours to turn and reposition the vessel. Data will be shot parallel to the shorelines in a north-south direction, keeping recording equipment-streamers in line with Cook Inlet currents and tides and keeping the equipment away from shallow waters on the east and west sides.

The 3-D survey will be followed by geohazard and geotechnical surveys, with the surveys site specific, determined by the number of potential drill sites in an area, and covering less than one lease block in a day.

Exploration wells

The seismic and other surveys on Hilcorp's OCS blocks in lower Cook Inlet are preparatory to exploration drilling.

Beginning in the spring of 2020, Hilcorp "plans to possibly drill two and as

see HILCORP PLANS page 9

akrdc.org

39th Annual ALASKA RESOURCES CONFERENCE

November 14-15, 2018 // Dena'ina Center // Anchorage

- Industry updates and new opportunities
- Economic forecasts
- The latest on new projects and prospects
- Key state and federal public policy issues
- Networking opportunities
- Exhibit hall

Sponsor and learn more at akrdc.org








RESOURCE DEVELOPMENT COUNCIL

Growing Alaska Through Responsible Resource Development



TOURISM



FISHERIES



OIL & GAS



MINING



FORESTRY



Excellence in Environmental & Emergency Solutions

- **Emergency Response**
- **Industrial Services**
- **Marine Services**
- **Remediation Services**
- **Waste Management**
- **Glycol Distillation**

907-258-1558

nrcc.com

ALTERNATIVE ENERGY

Buckland's solar arrays set for operation

A new solar power project in a remote village in northwest Alaska aims to demonstrate the potential for renewable energy to reduce the region's high utility costs.

Buckland's village-operated electric utility was set to turn on three new solar arrays the week of Oct. 22 and is planning for a battery system to be operational next year, Alaska's Energy Desk reported Oct. 24.

The project supported by Northwest Alaska Native Association and the U.S. Department of Energy is part a regional push toward renewable energy.

Buckland has about 400 residents and is about 75 miles from the regional hub of Kotzebue. The village is only reachable by boat or plane.

Most of Buckland's power currently comes from generators fueled by diesel. Electricity in rural Alaska can cost six times the national average, resulting in monthly light bills that can exceed \$1,000.

A state subsidy program helps reduce residential electric bills, but residents have to pay full price if they exceed 500 kilowatt hours in a month — a little more than half of the national average residential power bill.

Power is 47 cents per kilowatt hour in Buckland, according to state data. Anchorage is 19 cents and the national average is 13 cents.

"Everybody's for it — everybody wants to get away from the fuel," said Erik Weber, who runs the village water plant and assisted with the solar installation. "When things like an energy crisis come up and there's not a lot of fuel to go around, we can keep going here."

The project is probably not going to slash electric prices overnight, but these projects could help protect villages against spikes in the prices of diesel and heating fuel, said Sonny Adams, the association's director of energy.

"One of our goals needs to be building capacity with not only the village and the region, but also the state of Alaska," Adams said. "This is the starting point."

—ASSOCIATED PRESS



Kyra Matala
Operator, Central Gas Facility
BP Alaska

The Alaskan Spirit is
Our Greatest Resource.

Alaskan ingenuity and determination are leading to exciting breakthroughs at BP.

The spirit that has fueled BP for decades is paving the way to new innovations. We're now producing more oil from Prudhoe Bay, putting more wells on line, celebrating three years of no decline and making strides towards the development of Alaska's LNG project. And we're not done yet. At BP, we're working hard to ensure that Alaska keeps advancing toward a brighter future.

bp.com/Alaska

keep advancing



We know pipes.
Inside and out.

At Flowline Alaska, we've spent decades helping to keep oil flowing on the North Slope. It's a record we're proud of, and we look forward to a future where we can provide the service and support necessary to grow and expand Alaska's energy industry. Because we want to keep Alaska's oil flowing, today and tomorrow.

FLOWLINE
ALASKA, INC.

flowlinealaska.com
(907) 456-4911

Keeping you covered.

To advertise in Petroleum News, contact Susan Crane at 907.770.5592

Petroleum
NEWS
petroleumnews.com

A limited offer from Petroleum News!

Catch these fall savings

First time subscribers mention this ad to receive 15% off.

CONTACT
Renee Garbutt
281-978-2771
rgarbutt@petroleumnews.com

INSPIRATIONS
Hair & Nail Salon

We offer personalized service, catering to the busy professional.

- 11am — 7pm (Late night appointments by pre-arrangement only)
- Each stylist has a separate, enclosed work area for your privacy and comfort

700 W Northern Lights Blvd., Anchorage, Alaska 99503

• Call for appointments • 229-6000

Mention this ad and receive a 10% discount on hair services!

continued from page 1

GMT-2 DEVELOPMENT

ings: Overall the company's quarterly adjusted earnings increased from \$198 million to \$1.6 billion, with earnings for the first nine months of the year increasing from \$199 million to \$4.0 billion.

ConocoPhillips primarily attributes its increasing profitability to the rising price of oil.

High oil price not assumed

During an Oct. 25 earnings call Ryan Lance, ConocoPhillips chairman and CEO, emphasized that the company is still basing its planning on a West Texas Intermediate oil price of less than \$40 per barrel for sustaining production and that the company was not ramping up activity to chase higher oil prices. Lance also commented that ConocoPhillips anticipates maintaining its capital expenditure in 2019 at around its 2018 level, exclusive of acquisitions such as the recent purchase of Anadarko's Alaska interests. The company anticipates announcing its 2019 plans in December.

The GMT-2 development

The GMT-2 development, to which ConocoPhillips has now committed, is the latest of a series of step-out developments from the Colville River delta west into the NPR-A. Previous developments in this series consist of the CD-5 pad and Greater Mooses Tooth-1.

GMT-2, at a total cost of around \$1.3 billion, will involve the construction of a new 14-acre pad and up to 48 wells, an 8.2-mile road and an 8.6-mile pipeline connecting GMT-2 with GMT-1. Production is expected to peak at 35,000 to 40,000 barrels per day.

ConocoPhillips spokeswoman Natalie Lowman has told Petroleum News that detailed design for the project is underway and that the company plans to lay gravel for the project in early 2019. There will be three construction seasons, beginning in the winter of 2019-20, with construction employment possibly peaking at around 700 jobs. ConocoPhillips anticipates first oil in the fourth quarter of 2021, Lowman told Petroleum News.

Willow

Looking further into the future, the Bureau of Land Management is preparing an environmental impact statement for ConocoPhillips' proposed Willow development, a potential major NPR-A oil field in the Bear Tooth unit, to the west of Mooses Tooth. Depending on the timing of the EIS and the development schedule, first oil could flow from Willow around 2024-25, with a peak production rate as high as 100,000 barrels per day. ●

continued from page 1

PRICE REVIVAL

gas players are taking a wary view of talk that the LNG business may soon give their sector a big boost, ending years of depressed gas prices in Western Canada.

"Export (LNG) projects can't come soon enough," said Bank of America, noting how badly Alberta and British Columbia gas needs additional outlets.

Links could be 'reset'

The combination of the investment go-ahead for LNG Canada, along with new tolling arrangements on the main natural gas export pipelines starting in 2020, would help "reset" the links between AECO (Alberta's trading hub) and North American benchmarks, where AECO prices were C\$2.37 per thousand cubic feet at the start of October compared with the equivalent C\$4.10 Henry Hub benchmark.

If the C\$40 billion LNG Canada project does proceed to completion, it will be the first major LNG operation in Canada that is expected to consume about 2 billion cubic feet per day of gas by the mid-2020s — a significant increase in Western Canada output that is currently 16.5 bcf per day.

"It does offer hope that there's a future in this (Western Canada Sedimentary) basin," said Gary Leach, president of the Explorers and Producers Association of Canada.

Mike Rose, chief executive officer of Tourmaline Oil, Canada's second largest gas producer, said LNG Canada will have no impact on Western Canada prices in the short term, but should provide a lift to demand and support more robust prices once the facility is operating.

"At least getting one project going improves the psychology (of the gas sector) a little bit ... (raising hopes) that we can get pipelines and projects built."

Development in waves

Greg Colman, National Bank Financial analyst, said in a research note that LNG development tends to occur in waves rather than isolation because "if the economics make sense for one project, they make sense for many."

Dale Dusterhoft, chief executive officer of Trican Well Service, agreed with the views of Rose and Colman that the impact of LNG Canada "on the immediate market will likely not be great in terms of an early recovery of pricing, but if we can get this and others built behind it, it's great for the long-term future of the Canadian business."

He said well completions tied to the project will start to grow in 2020 as the completion date nears and producers increase exploration budgets to prove up their resources.

LNG Canada is "positive in the sense that it's a general sentiment lift," said GMP FirstEnergy director of institutional research Martin King, although he cautioned that the project's first two liquefaction trains will likely not have much impact on domestic gas prices.

But the prospect of the first substantial investment in the Canadian oil patch in a long time "lifts a dark cloud that has been hanging over (Canada). It certainly gives producers something to hang their hats on."

King estimated that between 300 million and 600 million cubic feet per day of Western Canada production has been shut down at various times this year.

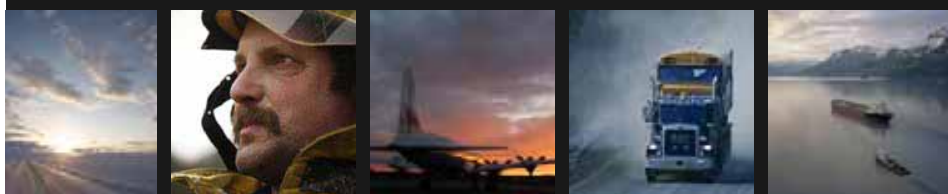
National Bank of Canada analysts said LNG Canada has the potential to be the first of many LNG ventures assuming Canadian LNG follows the global trend where LNG export areas "tend to be the hubs of terminals, rather than standalone facilities." ●

Contact Gary Park through publisher@petroleumnews.com

WHATEVER



WHENEVER



WHEREVER

Creative photography for the oil & gas industry.
judypatrickphotography.com
907.258.4704

JUDY PATRICK
PHOTOGRAPHY

continued from page 6

HILCORP PLANS

many as four exploratory wells,” pending results of the 3-D seismic survey over its lower Cook Inlet OCS leases, the company said.

“Hilcorp Alaska plans to conduct the exploratory drilling program April to October between 2020 and 2022,” with the exact start date currently unknown and “dependent on the results of the seismic survey, geohazard survey, and scheduling availability of the drill rig.”

Each well is expected to take some 40-60 days to drill and test.

The drilling rig would be similar to the Spartan 151, which can operate in maximum water depths of 150 feet and drill to a depth of 25,000 feet.

In the application Hilcorp said it expected to drill to depths of 7,000 to 16,000 feet, depending on the well, each of which is expected to take 40-60 days to drill and up to 10-21 days of well testing. If two wells are drilled, it would take some 80-120 days to complete the full program; if four wells are drilled, 160-240 days.

Hilcorp was the only bidder in BOEM’s 2017 OCS Cook Inlet lease sale, taking tracts in federal waters off Ninilchik and Anchor Point, a three-tract block southwest of Anchor Point, and a block of eight tracts farther south and in the middle of the inlet.

Late last December Hilcorp applied to BOEM to collect airborne gravity and magnetic data in lower Cook Inlet over an area which generally overlaps the federal OCS waters of the BOEM lower Cook Inlet planning area, including aerial gravity and magnetic survey of all 14 lease blocks Hilcorp acquired in the 2017 sale. Hilcorp also planned to have the surveys run over the Iniskin

Peninsula. Fixed-wing aircraft were to be used offshore and rotor-wing aircraft onshore, with data collection expected to take two to three weeks. The survey was originally planned for May, the original permit was for June 1 to Sept. 30, and BOEM said the company notified it on Aug. 17 that they had completed the survey.

Iniskin Peninsula

In the application Hilcorp Alaska said it began baseline exploratory data collection in 2013 for proposed land-based oil and gas exploration and development on the Iniskin Peninsula near Chinitna Bay some 60 miles west of Homer on the west side of Cook Inlet in the Fitz Creek drainage. The 2-D program was proposed over 41 miles between Chinitna Bay and Iniskin Bay.

New project infrastructure proposed for the Iniskin project includes material sites, a 4.3-mile access road, prefabricated bridges to cross four streams, an air strip, barge landing/staging areas, fuel storage facilities, water wells and extraction sites, an intertidal causeway, a camp/staging area and a drill pad, with construction anticipated to start in 2020.

Hilcorp said initial delivery would be by low-draft tug and barge vessels with barge landing/staging areas at Camp Point and Fitz Creek to be used for storage and stockpiling of supplies, equipment and fuel.

An intertidal rock causeway is proposed adjacent to the Fitz Creek staging area to improve accessibility of the barge landing. The causeway would extend seaward from the high tide line some 1,200 feet to a landing area 150 feet wide. Rock fill would be sourced from the Gaikema material site.

“The causeway will enable more consistent use of the Fitz Creek staging area to receive freight and fuel with fewer limitations due to short high tide windows and

result in less dependency on the Camp Point staging area,” Hilcorp said in the application, and would also enable quicker response to emergency incidents and reduce the risk associated with materials logistics and fuel deliveries.

When the causeway is no longer needed for the project, rock fill would be removed, allowing wave actions and currents to natural fill and cover the disturbed area.

“The project camp site is located along the historic road alignment at a location where bedrock can be quarried and the pad developed by cutting to grade and utilizing excavated rock for fill,” the company said.

Hilcorp said a dock face would be constructed around the rock causeway so that barges can dock along it.

Existing assets

The application also covers work Hilcorp does on existing facilities, such as verifying the structural integrity of platforms and pipelines within Cook Inlet each year, with routine maintenance activities including subsea pipeline inspections, stabilizations and repairs; platform leg inspections and repairs; and anode sled installations and/or replacement.

Hilcorp also plans to plug and abandon the discovery well in the North Cook Inlet unit, a well drilled more than 50 years ago and planned to be abandoned. The company said it plans to conduct a geohazard survey to locate the well and conduct P&A activities for a previously drilled exploration well. The work is planned for 2020.

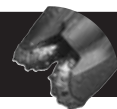
The geohazard survey location is a quarter to a half-mile south of the Tyonek platform and will take some seven days.

P&A activities, once the well is located, are expected to take 60-90 days in May through July of 2020. A jack-

see HILCORP PLANS page 12



Oil Patch Bits



ASRC announces industrial services acquisition

Arctic Slope Regional Corp. said Oct. 25 that it is pleased to announce the acquisition of Brad Cole Construction by its wholly owned subsidiary ASRC Industrial Services LLC.

Headquartered in Carrollton, Georgia, BCC provides heavy civil site services, which includes site stabilization, remediation, demolition, excavation and dewatering. BCC serves a diverse customer portfolio made up of industrial and commercial customers, state and local governments, as well as federal agencies. Since the company’s founding in 1977, BCC has differentiated itself from competitors via its relentless focus on safety and ability to deliver challenging projects on time and under budget. BCC becomes the third member of

AIS’s remediation and response services operating group, following the February 2018 acquisition of Mavo Systems and June 2018 acquisition of Hudspeth & Associates.

“On behalf of ASRC’s board of directors, I am pleased to welcome the management team and talented employees of Brad Cole Construction to the ASRC family of companies,” said Rex A. Rock Sr., president and CEO of ASRC. “The acquisition of BCC represents the eighth acquisition we have made in pursuit of the AIS strategy we initiated a little over two years ago. I am happy with the progression of the strategy to date and am confident the AIS and BCC management teams will work collaboratively to sustain the positive momentum and ultimately create a scaled platform that delivers durable, enduring benefits to ASRC’s shareholders.”

Companies involved in Alaska’s oil and gas industry

ADVERTISER	PAGE AD APPEARS	ADVERTISER	PAGE AD APPEARS	ADVERTISER	PAGE AD APPEARS
A					
Afognak Leasing LLC		Colville Inc.		Maritime Helicopters	2
Air Liquide		Computing Alternatives	11	Motion & Flow Control Products	
Alaska Energy Services, LLC		CONAM Construction		N-P	
Alaska Dreams	12	Cruz Construction		Nabors Alaska Drilling	
Alaska Frac Consulting LLC		Dowland-Bach Corp.		Nalco Champion	
Alaska Frontier Constructors (AFC)		Doyon Anvil		NANA WorleyParsons	
Alaska Marine Lines	5	Doyon Associated		Nature Conservancy, The	
Alaska Materials		Doyon Drilling		NEI Fluid Technology	
Alaska Railroad		Doyon, Limited		Nordic Calista	5
Alaska Rubber & Rigging Supply Inc.		exp Energy Services		North Slope Telecom	
Alaska Steel Co.	4	F. R. Bell & Associates, Inc.		Northern Air Cargo	
Alaska Tent & Tarp		Fairweather		NRC Alaska	6
Alaska Textiles	3	Flowline Alaska	7	Oil Search	
Alaska West Express	5	Fluor		Opti Staffing	
Alpha Seismic Compressors		Foss Maritime		PENCO	5
American Marine	5	Fugro		Petro Star Lubricants	
Arctic Catering & Support Services		G-M			
Arctic Controls	4	Geotemps		Petroleum Equipment & Services, Inc.	
Arctic Fox Environmental		GMW Fire Protection		PRA (Petrotechnical Resources of Alaska)	
Arctic Wire Rope & Supply		Greer Tank & Welding		Price Gregory International	
ARCTOS Alaska, Division of NORTECH		Guess & Rudd, PC	3	Q-Z	
Armstrong		Inspirations	7	Resource Development Council	
ASRC Energy Services		Judy Patrick Photography	8	SAExploration	
AT&T		Kuukpik Arctic Services		Security Aviation	
Avalon Development		Last Frontier Air Ventures		Sourdough Express	12
Aviator Hotel		Little Red Services, Inc. (LRS)		Strategic Action Associates	
B-F					
Bombay Deluxe		Lounsbury & Associates	3	Tanks-A-Lot	
BP	7	Lynden Air Cargo	5	The Local Pages	10
BrandSafway Services		Lynden Air Freight	5	Unique Machine	
Brooks Range Supply		Lynden Inc.	5	Volant Products	
Calista Corp.		Lynden International	5	Waste Management	
Chosen Construction		Lynden Logistics	5	Weston Solutions	
		Lynden Transport	5		
		Mapmakers of Alaska			
		MAPPa Testlab			

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

continued from page 1

RAIL RESCUE

Notley said rail is one means of tackling the punishing differential between the price Canada receives for its oil in North America and the product's trading value on the global market.

That spread has recently climbed as high as US\$46 a barrel and is heading for US\$50 compared with the historic discount of US\$10.

Plan submitted

The Notley administration has opened the door to negotiations by submitting a plan to the federal government that lays out the specific costs and options of overcoming Alberta's stranded oil problem.

Tim McMillan, president of the Canadian Association of Petroleum Producers, said the Canadian government has stymied private-sector investment in pipelines, including the Northern Gateway project that could have solved the bottleneck, it "needs to help correct some of the distortions it has created."

Even at a US\$30 differential, the 3.5 million barrels per day of total Western Canadian oil output is costing producers about C\$100 million in daily revenues, said GMP FirstEnergy analyst Michael Dunn.

However, not all of the 1.8 million bpd of heavy Canadian crude that moved on Enbridge's mainline to the U.S. and Eastern Canada is subject to the record-setting discount. Some of those volumes are shipped on firm, committed contracts, fetching prices closer to the West Texas Intermediate benchmark.

Scotiabank commodity economist Rory Johnston said, "there are layered discounts throughout the entire chain," adding he was not sure how much of the barrels are subject to the large discounts.

Kevin Birn, vice president of North American crude oil markets at IHS Markit, said that at current price differentials even oil-by-truck could be an economic choice for some companies.

Pressure for answers

But the situation is putting pressure on all players to find answers, with discussions between Western Canadian producers, U.S. refineries and Enbridge to change the way the pipeline company operates its mainline pipe in 2020, including a possible switch from the established nomination system when producers bid for pipeline capacity to one that runs on long-term contracts.

Notley said that regardless of "the ideas out there" rail offers the most immediate answer as pressure

builds on storage.

"We need to get more tanker cars on to rail. That's the bottom line," she said.

A spokeswoman for Notley said "we are suggesting that a (federal government) investment in two unit trains a day would help alleviate the pressure."

A unit train usually contains 100 tanker cars, which can deliver about 65,000 barrels — not enough to keep pace with Scotiabank forecasts that crude-by-rail volumes will rise 50 percent by the end of 2018 to 300,000 bpd and that energy consultant Greg Stringham said could reach 450,000 bpd in 2019.

Underscoring the urgency, Stringham said it usually takes about a year for railroads to order new locomotives, at up to C\$400 million each, but the railroads show little desire to spend millions of dollars on short-term capital that would take years to repay, especially if new pipelines are introduced during the working life of new locomotives.

Canadian Pacific Railway Chief Executive Officer Keith Creel told a conference call in mid-October that "pipelines will come — it's not a matter of if, it's when."

—GARY PARK

Contact Gary Park through publisher@petroleumnews.com

continued from page 1

IEA REPORT

able energy and the deployment of new technologies such as carbon capture and storage.

In other words, the report suggests that these economies would remain centered on energy but would use energy as a means of diversification and of maintaining a comparative advantage for certain types of economic activity.

Focus on six countries

The report focuses particularly on the economies of Iraq, Nigeria, Russia, Saudi Arabia, the United Arab Emirates and Venezuela, countries that are net exporters of oil and where oil exports account for a high proportion of total exports and of fiscal revenues.

The report says that the evolving energy scene places sustained pressure on these countries, with the shale oil revolution in the United States upending the traditional oil market, a strong international drive for improved energy efficiency and the specter of a long-term response to climate change. At the same time, the extreme recent volatility in the price of oil has brought to light the structural weaknesses of the oil dependent economies: Major swings in the price of oil tend to destabilize economies that are not resilient to the ups and downs of the price.

Several scenarios

The report examines the possible out-

comes of different future energy scenarios.

In one scenario current national policies continue, within the context of the continued evolution of known technologies and continuing rising demand for oil and gas, as overall energy demand increases. Under this scenario, the use of renewable energy, particularly wind and solar grows rapidly and becomes the cheapest source of new power generation in many countries. But, with that growing energy demand, the equilibrium price of oil and gas will also likely increase.

Even in this apparently benign environment for oil and gas production, economic reform is necessary, given the risk of market volatility, long-term government policy uncertainty and, in some countries, the need to create employment opportunities for growing, youthful populations, the report says.

Moreover, in a future scenario where oil prices remain relatively low, perhaps settling in a \$60 to \$70 per barrel range, the risks to these oil dependent economies multiply, the report suggests. In this situation, without reform, there would be a cumulative major loss in revenues, leading to current account deficits, downward pressure on currencies and lower government spending. That in turn would lead to a drop in personal disposable income.

In another possible future scenario stronger government policies requiring better fuel efficiency and fuel switching, with a rapid growth in electrically powered transportation, there would be an earlier peak in oil demand, while natural gas

usage might also be curtailed. In this situation, although hydrocarbon related revenues through to 2040 might prove similar to those in a low oil price scenario, the change in energy sourcing would demand economic diversification in hitherto oil export dependent states.

Hydrocarbon investment remains vital

On the other hand, it remains vital that oil producing nations maintain appropriate investment in their hydrocarbon industries, given that that oil and gas represent for them a low-cost resource base. The report cites the examples of Nigeria and Venezuela, where investment in upstream oil and gas has run into problems, with serious economic consequences. In Venezuela, in particular, where there are few signs of any macroeconomic or policy changes that might arrest the oil production decline, production has fallen by half since 2016, the report says.

And, while periods of relatively high oil prices may bring temporary relief to oil dependent countries, these periods also reduce the incentives for these economies to reform while, at the same time, encouraging policies elsewhere to reduce oil and gas dependency. The likely outcome is that prices will fall again.

The report particularly cites the Middle East, where the climate offers the opportunity to use solar energy in concert with policies for reducing oil and gas consumption. Also in the Middle East, an increased emphasis on refining and petrochemical production could generate new revenue

streams while providing a hedge against reduced global demand for oil for transportation. Oil and gas producing countries could also play leading roles in new arenas, such as carbon capture, utilization and storage, and the supply of hydrogen, the report suggests.

Change is inevitable

The report says that at this point in history fundamental changes to the economic development concepts for hydrocarbon resource-rich countries appear inevitable. But change will be complex and challenging. Inaction or the failure to reduce dependence on hydrocarbon revenues would increase the risks faced by the hydrocarbon producing nations and the global energy market.

On the other hand, successful reform would have multiple implications for that market and for efforts to reach global environmental goals, the report says. For example, reducing the dependence on oil revenues for services such as health care and education could reduce the oil price level at which oil producing countries remain solvent — in that case low-cost producers could viably capture a larger share of the oil market. The resulting lower equilibrium oil price could then trigger environmental policy responses, designed, for example, to encourage electric car use.

—ALAN BAILEY

Contact Alan Bailey at abailey@petroleumnews.com



IN CONNECTION WITH



A quicker, easier, smarter way of connecting local business with local customers.



MOBILE | ONLINE | PRINT

WANT TO LIST YOUR BUSINESS?

907-903-4526

VISIT US ONLINE AT WWW.THELOCALPAGES.COM

find local businesses online at WWW.GONFIND.COM

continued from page 1

CONOCO LEADERSHIP

production operations from 2012-16.

Walette, currently executive vice president, financial, commercial and chief financial officer, will be named executive vice president and chief financial officer, with responsibility for finance, commercial acquisitions and divestitures and information technology functions. Wallette has more than 30 years of experience and has served in several technical and leadership roles in ConocoPhillips, including leading the company's business development function from 2012-16.

The company said the appointments are effective Jan. 1. Hirshberg will

The company said the appointments are effective Jan. 1. Hirshberg will remain in his current position until then to provide support during the transition of his responsibilities.

remain in his current position until then to provide support during the transition of his responsibilities. Fox and Wallette will continue to report to Chairman and Chief Executive Officer Ryan Lance.

Lance thanked Hirshberg for his many contributions to the company, saying he "played a valuable role in our launch as an independent exploration and production company and in the successful execution of our business strategy."

—PETROLEUM NEWS

continued from page 1

PARALLEL PATHS

an objective comparison between the two options, leading to a decision on which option to choose. The idea is that both the Siemens investigation and the Titan FEED project would be completed by early summer.

Developments to date

Following the purchase of Pentex Natural Gas Co. from AIDEA, IGU has combined with Pentex subsidiary Fairbanks Natural Gas to form a consolidated gas utility for the Fairbanks area. Pentex also owns the Titan plant and the trucking operation that carries LNG from the plant to Fairbanks. Currently FNG supplies gas to a relatively small number of customers in central Fairbanks. A few years ago, both FNG and IGU made some initial expansions to their gas distribution networks, under the IEP, in anticipation of an expanded gas supply.

Also, as part of the IEP, IGU is in the process of building a new 5.25 million-gallon LNG storage facility in Fairbanks, to support increased gas supplies for Fairbanks consumers. The new tank will enable use to be made of the expanded gas distribution network. However, the IEP plan has assumed that IGU would expand the Titan plant in two stages, to support growing gas demand in Fairbanks.

The Siemens proposal

The Siemens proposal is that, rather than expanding the Titan plant, Siemens would build a completely new LNG plant adjacent to a railroad siding near Houston. The plant would be connected by pipeline to a nearby Enstar Natural Gas Co. gas transmission line — Siemens says that it has a preliminary agreement with a Cook Inlet gas producer for an appropriately priced gas supply. There is also the possibility of a gas supply local to the plant, if a local gas well could be proved out.

The plant would be modular in design, with the capability of expansion in response to rising LNG demand, and would be built on Alaska Native owned land. Knik Tribe has been working with Siemens on the proposal — the idea is that Siemens would build the plant under contract with Knik, so that Knik would own the project. IGU would contract with Knik for an LNG supply delivered to Fairbanks at some agreed price, but with IGU paying for the railroad transportation of the LNG to Fairbanks.

Any contract with Knik would be

passed through to Siemens, so that Siemens would be responsible for ensuring the continuity of LNG production. And Siemens would fund the construction of the LNG plant while accepting any risk of construction cost overruns. Essentially, Siemens anticipates making a profit from the sale of LNG processed through its plant.

The Siemens MOU

The MOU now agreed to between IGU and Siemens sets out a two-stage process that would lead to an LNG cost model that IGU could use to make a decision on whether to sign-up for a Knik/Siemens LNG supply.

The first stage involves a negotiation between IGU and Siemens, leading to the preparation and signing of an LNG supply term sheet that would provide a basis for Siemens to finalize the design of the Houston plant and of the systems for the unloading of LNG in Fairbanks and North Pole. That would then enable Siemens to make a firm price offer to IGU for the required LNG supply.

The MOU says that the target date for completion of the term sheet is Dec. 31, and that by that date IGU, with support from Siemens, would also prepare a plan for integrating the existing Titan plant into the future LNG supply arrangements.

The MOU then commits Siemens to making a firm LNG pricing offer to IGU

no later than five months after the signing of the term sheet. Assuming that the term sheet is signed by the end of this year, that would lead to a firm price for the Knik/Siemens LNG by June 1.

A credible timeframe?

Much discussion during the IGU work session revolved around the credibility of Siemens' proposed timeframe, in particular the feasibility of completing the term sheet by the end of December. An overrun in the Siemens schedule would create complications for the board in making its development decision and could delay the expansion of the LNG supply for Fairbanks.

IGU CEO Dan Britton commented that Siemens had originally proposed completion of a term sheet by the end of

November, but that the IGU team had pushed back on that seemingly unrealistic expectation — hence the Dec. 31 date. Robin Brena, counsel to IGU, commented that the Dec. 31 date appeared feasible, but was qualified as being a target rather than a firm commitment. Brena also commented that the term sheet would be needed in order to conduct a side-by-side comparison of the Knik/Siemens and Titan expansion projects.

Board member Gary Wilken, who had previously been involved in the IEP as a member of the AIDEA board, expressed skepticism over what appeared to him to be a highly optimistic project schedule. A process conducted in the IEP, similar to the development of the term sheet, had

see PARALLEL PATHS page 12

Computing Alternatives



Information Technology Professionals

WE OFFER THE FOLLOWING SOLUTIONS TO PUBLIC AND PRIVATE SECTORS

- Custom Web, Desktop, & Mobile apps
- IT Business Analysis
- Database Design & Modeling
- Microsoft Server Maintenance
 - SQL Server Database Administration
- Oil & Gas Risk Assessment and Regulatory Compliance Tools
 - Revenue Taxation
 - Hospitality Systems

Ph| 907-644-4522
Fx| 907-644-4523
services@Computing-ALT.com
www.Computing-ALT.com
5701 Silverado Way, Ste. 1
Anchorage, AK 99518



SPE ALASKA

BACKYARD BBQ SCHOLARSHIP FUNDRAISER

11.16.2018

VIKING HALL
8141 BRIARWOOD ST.
6:00 PM

LIVE MUSIC & RAFFLE

TICKETS AT WWW.SPEALASKA.ORG

ARCTIC TECHNOLOGY CONFERENCE 2018



REGISTER TODAY
Visit go.otcnet.org/RegisterArctic

5-7 November 2018 /// **Houston, Texas, USA** /// **Hilton Americas**



Time is running out. Register today to discover the latest technologies in Arctic E&P.

continued from page 11

PARALLEL PATHS

previously taken seven months to complete at a cost of \$391,700, without any resulting project, Wilken said. To bring all these pieces together in two months, including the two weeks of the Christmas period, based on what appears to be a more expensive project than the Titan expansion, seems unrealistic, he said.

“What is going to change tomorrow that has not happened in the past, to arrive at what is called the LNG supply contract term sheet?” Wilken asked.

Parallel projects

Board Chair Pamela Throop responded that the FEED for the Titan plant expansion would proceed in parallel with the Siemens project and would not, therefore, be delayed. The full results of the FEED would not be known until after Siemens has completed its work, she said. Britton clarified that the FEED was expected to complete around May 15, but that some of the cost estimating for the Titan project would not be finished until after that date.

Throop also commented that the board has a duty to the public to consider all reasonable options for the LNG supply.

Board member Jack Wilbur expressed his skepticism about Siemens’ anticipat-

When it came to the proposed FEED for the Titan plant expansion, much of the discussion revolved around how to achieve sufficient security of gas supply for Fairbanks gas consumers, who would be dependent on the gas for the heating of buildings during severe Fairbanks winter conditions.

ed time to reach a firm price proposal for the LNG supply. If there is an overrun of several months in the completion of the Siemens work, would the board delay its decision regarding how to achieve the expanded LNG supply, he asked.

Ultimately the board passed a resolution authorizing the MOU with Siemens by four votes to two, with Wilken and Wilbur voting no.

Titan expansion

When it came to the proposed FEED for the Titan plant expansion, much of the discussion revolved around how to achieve sufficient security of gas supply for Fairbanks gas consumers, who would be dependent on the gas for the heating of buildings during severe Fairbanks winter conditions.

The current proposal for the first Titan expansion, originally developed by

AIDEA’s IEP team in conjunction with IGU, is to add a single 100,000 gallons per day LNG production train to the existing 50,000 gallons per day train at the plant. Britton has proposed to the board to commission Braemar Technical Services to conduct the FEED for this expansion project. Britton said that the improved project definition resulting from the FEED would reduce the uncertainty in the cost estimate for the project from around plus or minus 30 percent to around plus or minus 10 percent.

Having Braemar conduct the study would minimize the cost of the study because, with Braemar having been involved in investigating the Titan expansion in an earlier stage of the IEP, the company is already familiar with the project, Britton told the board. Moreover, the use of a single source award for the project would save time in putting the project underway, Britton said.

Two new LNG trains?

A lengthy discussion over what is meant by a firm gas supply for Fairbanks, and what would be required to achieve supply security, led to discussion over the possibility of adding two 50,000-gallon trains rather than a single 100,000-gallon train to the Titan plant. This would presumably reduce the vulnerability of the system to an LNG train failure.

Britton commented that a requirement

to be able to contend with the extended loss of a single LNG train would represent a significant change to the project and the project’s capital structure. The approach to date, by FNG and the IEP, has been to ensure a high level of reliability in the LNG plant, thereby balancing an acceptable level of supply security with an efficient capital structure. Going from the addition of a single 100,000-gallon train to two 50,000-gallon trains might increase the capital cost from, say, \$50 million to \$70 million, Britton suggested.

Britton also commented that the security of supply is inherently linked to the amount of LNG storage capacity in Fairbanks in relation to the rate of gas demand increase in the region. Low demand enables the storage facility to deal with an LNG supply interruption for an extended period. As demand increases, additional LNG production can be added to ensure continued supply security.

With a need to provide Braemar with a clear specification of the LNG plant requirements as a basis for conducting the plant FEED, Britton undertook to research information that would enable the board to resolve its quandary regarding the number of LNG trains required. ●

Contact Alan Bailey
at abailey@petroleumnews.com

LEADING THE INDUSTRY IN ADVANCED FABRIC COVERED STEEL BUILDINGS

ALASKA DREAMS INC.
INDUSTRIAL BUILDING SOLUTIONS

TOLL FREE 1.855.455.7712
FAIRBANKS | ANCHORAGE | WASHINGTON
WWW.ALASKADREAMSINC.COM
INFO@ALASKADREAMSINC.COM

continued from page 9

HILCORP PLANS

up rig similar to the Spartan 151 will be used.

Trading Bay, Drift River

Hilcorp said it plans to conduct exploratory drilling in the Trading Bay area and will conduct geohazard surveys over areas of interest prior to drilling, work which is projected for 2019 and expected to take some 30-60 days.

Exploratory drilling and well completion activities will take place in specific areas based on the geohazard survey, with one to two exploratory wells planned in the open water season of 2020.

And if the pipeline from the Drift River Terminal to the Christy Lee platform is abandoned during the 2019-24 period covered in the application, “the Drift River Terminal will be abandoned in place,” Hilcorp said, with no in-water work other than vessels.

—KRISTEN NELSON

Contact Kristen Nelson
at knelson@petroleumnews.com

SOURDOUGH
moving freight since 1898
EXPRESS

Dependable Service Since 1898
Visit www.SourdoughExpress.com