Petroleum news

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page 4 Alyeska completes long-duration planned maintenance shutdown

EXPLORATION & PRODUCTION

Oil Search endures

Drama creates concerns about Pikka; but board/executive team standing firm

By KAY CASHMAN
Petroleum News

Despite what hindsight might show to be an unwise decision, Oil Search Ltd.'s board quickly accepted the resignation of its top executive Keiran Wulff, creating worries about the future of the big North Slope Pikka development and further opportunity for regional competitor and shareholder Santos to take over the company — and Pikka — at an undervalued price.

KEIRAN WULFF

However, despite badgering from concerned analysts and investors, Oil Search's board and executive leadership team appear to be standing together in an attempt to stay on track with company-wide plans announced in November, including those for Alaska.

Chief Financial Officer Peter Fredricson, who joined Oil Search in March from gas pipeline owner APA Group, has been named acting chief executive; an appointment that has the support of the board and the executive leadership team. (That team includes Bruce Dingeman, president of Oil Search Alaska.)

Oil Search's unexpected July 19 announcement (July 18 in Alaska) that Wulff had resigned, combined with a conference call that gave some listeners the impression the company was backing off its development timeline for the Pikka unit, cast uncertainty about the project's

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EXPLORATION & PRODUCTION

Prudhoe drilling resumes

Hilcorp plans up to six new wells at Orion, in western satellite area

By KRISTEN NELSON
Petroleum News

Drilling is resuming at Prudhoe — at least in the western satellite area.

When Hilcorp North Slope, the Prudhoe Bay unit operator, filed its plan of development for the Prudhoe western satellites in January, it told the Alaska Division of Oil and Gas that the working interest owners had not approved a western satellite drilling program for 2021, although wellwork and workovers were planned.

In March, it delivered a similar message for the initial participating areas at Prudhoe.

Hilcorp said in its January filing that resumption of western satellite drilling in 2022 would "depend on market conditions and approval from working interest owners."

> ***"We are pleased to have support from our working interest partners to drill several Prudhoe Bay wells in the coming months." —Luke Saugier, Hilcorp senior vice president, Alaska***

On July 15, Hilcorp filed a proposed amendment to the Prudhoe western satellite POD, telling the division it "anticipates completing up to six new drill wells within the Orion PA, including up to three producers and one injector from the L pad

see **PRUDHOE DRILLING** *page 11*

FINANCE & ECONOMY

Oil makes comeback

OPEC+ solidarity, supply cuts due to Latin America unrest bode higher prices

By STEVE SUTHERLIN
Petroleum News

The oil trading week began with a mini crash July 19, as the footings crumbled from under major oil indexes. Alaska North Slope crude plunged $4.90 to close at $68.67 per barrel, Brent dropped $4.96 to close at $72.23 and West Texas Intermediate lost $5.39 to close at 66.42.

The mid-$70 trading range the indexes had occupied solidly since mid-June was lost to a sudden panic, as traders worried over new COVID-19 cases linked to the rapid spread of the virulent Delta variant.

The collapse threatened a long climb that began at the beginning of November, after Brent tumbled out of a trading range in the $40s, having hit a low of $37.94 on Oct. 30.

> ***The participating countries in the OPEC+ Declaration of Cooperation delivered 113% overall conformity to the production adjustments in June, OPEC said.***

On July 20, the slide continued. WTI hit $65.23 midday, before recovering to end the day up a dollar to $67.42. ANS and Brent pulled out of their own nosedives as well, with ANS eking out a 44-cent gain to close at $69.11, while Brent gained 73 cents to close at $69.35.

The midday low turned out to be the bottom of a

see **OIL PRICES** *page 11*

C$55 billion BC LNG venture by Indigenous community, producers

A British Columbia Indigenous community and the province's natural gas industry have launched plans for a massive LNG venture carrying the largest price tag of any industrial project in Canadian history and shrugging off uncertainty surrounding the global LNG outlook.

The Nisga'a Nation and a partnership of seven producing companies have teamed up to seek regulatory approval for their Ksi Lisims LNG project, which is estimated to cost C$55 billion — C$15 billion more than the Shell-led LNG Canada consortium which hopes to come onstream in 2025 — including a terminal and liquefaction plant, a pipeline from B.C. gas fields and the production of gas.

The Ksi Lisims proponents have made a pledge to achieve

see **LNG VENTURE** *page 10*

Panel on BP Statistical Review reflects global climate change

Following a presentation on July 8 on the results of BP's annual Statistical Review of World Energy, a panel of experts discussed some of the findings of the review. Much of the discussion revolved around efforts to tackle global warming and what these efforts mean for the future of the energy industry.

The COVID-19 pandemic

1 2 SERIES

The Statistical Review had found that a massive drop in energy usage in 2020 in response to the COVID-19 pandemic resulted in a drop in global carbon emissions matching the annual drop required to meet the emissions targets set in the 2015 Paris agreement on climate change. And, despite the fall in energy usage, there was

see **BP REVIEW** *page 8*

Agency decision takes Oil Search step closer to Pikka STP approval

On July 20 Tom Stokes, director of the Alaska Department of Natural Resources' Division of Oil and Gas, issued a proposed determination on a combined Pikka seawater treatment plant and make-up water and gas lines easement, bringing Oil Search Alaska a little closer to final division approval of its big North Slope development.

TOM STOKES

The seawater treatment plant and related pipelines will provide a reliable and predictable supply of make-up water of sufficient quantity

see **STP APPROVAL** *page 7*

Shell plans second carbon capture facility at Alberta refinery site

Royal Dutch Shell will decide within two years whether to quiet some of its critics and join an industry push towards net zero carbon emissions by 2050.

It is weighing a proposed Polaris carbon capture and storage, CCS, facility at its large Scotford refinery and petrochemical complex near Edmonton but has yet to put a price tag on the project.

The venture is currently designed to sequester 750,000 metric tons a year from Shell's own operations and eventually store carbon dioxide on behalf of other industrial emitters.

The company's existing Quest CCS, also at the Scotford site, has already stored more than 6 million mt during its ini-

see **CARBON CAPTURE** *page 10*

● GOVERNMENT

Eni fined $440,000 for failure to test

AOGCC requiring corrective actions; 19 wells not tested for mechanical integrity within required 4-years; Eni also fined previously

By KRISTEN NELSON

Petroleum News

The Alaska Oil and Gas Conservation Commission is fining Eni US Operating Co. $440,000 for late mechanical integrity tests on 19 wells.

In a July 21 order, the commission said Eni failed to test the injection wells at Nikaitchuq within the required four-year cycle. AOGCC said this violation is a recurrence of missed mechanical integrity tests in the previous testing cycle and said changes the company made in its tracking system, proposed to rectify the 2016 violations, did not prevent recurrence.

The commission held an informal review with Eni on July 8. The company's "presentation outlined the summary of events, the root causes for missing the MIT deadlines, and solutions in response to the proposed enforcement," AOGCC said, but the company did not dispute the violations, although it did suggest the penalty amount be reduced.

The current mechanical integrity test results were due in December, based on previous tests being completed in December 2016, and Eni notified the commission in March that the tests had been missed and were overdue, but did not request additional time to complete the tests.

The commission said the violations at the Nikaitchuq unit "are not isolated and demonstrate Eni's ongoing compliance problems," which include the earlier failure to test wells at Nikaitchuq, resulting in a $110,000 fine; failure to submit blow out prevention equipment tests at Nordic Rig 4 in 2018; and failure to complete required sundry report of well work within the required time for Nikaitchuq unit well SD 37-DSP1, resulting in a $10,000 fine.

In addition to the current penalty, "Eni is required to improve its tracking system for regulatory obligations by implementing the corrections actions to the identified causal factors" the company identified in its investigation report on the failure to meet the testing requirements.

Testing results

"Eni worked with diligence and urgency to coordinate with AOGCC to witness the required testing," and the commission witnessed passing tests on 13 of the 19 wells on March 21 and April 30, mitigating the penalty.

While daily penalties were not imposed, this violation did occur after a penalty was assessed in 2016 for the same violation, the commission said. The penalty is $20,000 for each of the 19 wells overdue for testing, and an additional $10,000 for each of the six wells which failed the required test.

After the 2016 failure to test, the commission required, in addition to the fine, that Eni "develop and implement a tracking system for regulatory obligations, including an automated alert for approaching and past-due obligations, with notifications provided to Eni personnel responsible for the regulatory obligation."

In addition to the current penalty, "Eni is required to improve its tracking system for regulatory obligations by implementing the corrections actions to the identified causal factors" the company identified in its investigation report on the failure to meet the testing requirements. ●

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● EXPLORATION & PRODUCTION

Hilcorp files PODs for small inlet fields

Beaver Creek, Birch Hill, in BLM-managed Kenai National Wildlife Refuge; North Trading Bay a unit produced from Monopod Platform

By KRISTEN NELSON
Petroleum News

Hilcorp Alaska has described varied plans to regulators for three small Cook Inlet units it operates — Beaver Creek, Birch Hill and North Trading Bay.

The onshore Beaver Creek and Birch Hill units are on federal leases in the Kenai National Wildlife Refuge, and those units are managed by the U.S. Department of the Interior's Bureau of Land Management, while North Trading Bay is in state waters and the unit is managed by the Alaska Division of Oil and Gas.

Beaver Creek

Beaver Creek is the only one of these three units currently in production, averaging 9,975 thousand cubic feet per day of natural gas in May, the most recent month for which Alaska Oil and Gas Conservation Commission data is available, and accounting for 4.5% of Cook Inlet natural gas production in that month. Discovered by Marathon Oil Co. in 1967, Beaver Creek is southwest of the Swanson River unit in the Kenai National Wildlife Refuge.

Hilcorp's 54th plan of development and operations for the unit, submitted to BLM in March, covers April 1, 2021, through March 31, 2022.

The company told BLM it drilled a sidetrack to the BCU-19 well targeting the Tyonek/Beluga sands during the 2019 POD, and, also under that plan, attempted to work over BCU-04RD, a Tyonek oil sand producer which failed in August 2019. A 2020 attempt to work it over failed, Hilcorp said, and there is a new plan in place for 2021.

Under the 2020 POD, Hilcorp said it restaged the sales compressor as a booster compressor and routed the BC-05 flowline through a process heater.

Also during the 2020 POD, the company completed well work on two wells previously shut-in, returning them to production: BCU-14A and BCU-09 were both perforated in the Sterling pool and brought online in August.

2021 planned work includes working over BCU-04RD, the Tyonek oil sand producer which failed mechanically in 2019, as well as evaluating and implementing additional well repairs and/or workover projects as they arise, Hilcorp said.

Birch Hill

The BLM-managed Birch Hill unit is northeast of Swanson River in the Kenai National Wildlife Refuge. AOGCC records show the field only produced in 1965, the year it was discovered by Standard Oil Company of California, with 65,331 thousand cubic feet of gas recorded in June 1965 from an exploration well, Birch Hill Unit 22-25.

Focus in recent years has been on finding a partner to explore the area, and alternatively, on planning to plug and abandon the well.

Hilcorp said in the 56th plan of development and operations, filed with BLM in March, that the 2020 POD focused on potential road access, and said it met with BLM and Cook Inlet Region Inc., which holds a 20% working interest, on potential northern road access. A 2019 analysis found the North Road to be the preferred option, Hilcorp said, because it has less environmental and wetlands impact, is significantly shorter than a road coming from the south from the Swanson River and involves less complicated land ownership and restrictions.

North Road construction is dependent on the Kenai Peninsula Borough Kenai Spur Highway extension project, as Hilcorp plans to construct North Road off the anticipated highway extension, originally scheduled for completion in 2020, but subsequently delayed to 2021, requiring an extension from BLM into 2021 to begin North Road construction.

CIRI Production Co. is a 20% working interest owner in the Birch Hill unit, and Hilcorp said the two have been searching for interested third parties to potentially develop oil and gas resources in the Birch Hill area. Two meetings were held with an interested party during the 2020 POD period but, Hilcorp said, so far interest is uncertain, although it and CIRI continue to look for and evaluate potential parties.

Hilcorp said it met with BLM during the 2019 POD period to discuss a new plug and abandon schedule for Birch Hill, and said the agency verbally agreed to extend the start date for North Road construction by one year and said it is proposing a new plan for Birth Hill, aligned with its request to extend the "Plug or Produce" deadline to May 1, 2022.

In reviewing results of the 2020 plan, Hilcorp said it made efforts to find partners to develop Birch Hill, but no real interest developed and said it "is moving forward with the planned P&A work for Birch Hill."

Hilcorp said BLM granted the requested extension for plug and produce and said plans to P&A Birch Hill are moving forward.

Under the 2021 plan, Hilcorp said the road design will be finalized in the summer, and grubbing/clearing for the gravel road path will occur, followed ty gravel road construction in the fall and P&A of the Birch Hill Unit 22-25 well in the fall/winter. If the surface owner requires road removal that would occur in the spring/summer of 2022.

North Trading Bay unit

Hilcorp submitted a 2021 plan of development for the North Trading Bay unit to the Alaska Division of Oil and Gas July 16, a plan which would be effective Oct. 15 through June 30, 2023.

North Trading Bay is in Cook Inlet at the northeastern corner of the Trading Bay unit

The company said it did not anticipate any production from the unit under the 2020 plan but "anticipated performing a technical analysis to identify drill targets to return the NTBU to production," and provided the division quarterly updates on that process. Under the 2020 POD, Hilcorp incorporated data acquired from the A-10RD well and evaluated potential

see HILCORP PODS page 4

UTILITIES

Railbelt Reliability Council moves forward

The Railbelt Reliability Council, or RRC, is moving forward in establishing its organization, with the intent to apply to the Regulatory Commission of Alaska on Oct. 1 for a certificate to operate as the electric reliability organization for the Alaska Railbelt electrical system, according to a notice published on the RCA website.

The organization has indicated that it is seeking a representative from a large commercial electricity consumer, to fill the remaining open seat on the RRC board of directors. A qualifying organization to fill the vacant seat would need to be among the top 15 energy or peak demand users on the system, or an entity that is recognized as a significant industrial user of Railbelt electricity.

The RRC anticipates bringing a more unified approach to the oversight and management of the Railbelt system by maintaining and mandating reliability standards for the high voltage electrical system; administering rules for open access to the transmission grid; conducting Railbelt-wide system planning; and investigating ways to share costs across the grid and to reduce power generation fuel costs for consumers.

In 2020 the state Legislature passed Senate Bill 123, legislation that enables the RCA to regulate EROs in Alaska. And on June 29 of this year the commission issued regulations for the implementation of SB 123, setting the legal rules under which EROs can be certified and regulated.

A key component of those regulations spells out parameters for ensuring that an ERO board has an appropriate balance of the various stakeholders in the electrical system. The remaining director that the RRC is seeking would represent large commercial stakeholder interests. Other stakeholders presumably encompass non-commercial electricity consumers and electricity suppliers, including the Railbelt electric utilities and independent power producers.

—ALAN BAILEY

● PIPELINE & DOWNSTREAM

Alyeska completes maintenance shutdown

By KRISTEN NELSON
Petroleum News

Alyeska Pipeline Service Co. has completed a July 17-18 30-hour maintenance shutdown of the trans-Alaska pipeline system, the first major maintenance shutdown of the line since August 2019.

Alyeska said this was the only long-duration shutdown scheduled for this year, with two short-duration shutdowns, 12 hours or less, scheduled for Aug. 13 and Aug. 27. A long-duration shutdown allows maintenance crews time and opportunity to work on coordinated projects along the line and at the Valdez Marine Terminal, the company said.

BRIGHAM MCCOWN

The shutdown began July 17 at 6 a.m. and the pipeline was restarted at 12:32 p.m. July 18, with oil over Atigun Pass by 1:10 p.m., with no safety or environmental incidents during the shutdown.

"Implementation teams successfully opened and closed crude oil pressure boundaries, safely moved tens of thousands of gallons of crude oil to temporary storage, made changes inside the pipeline control system, completed critical heavy lifts and field welded sections of the mainline pipe," the company said.

Months of preparation and planning between field locations and Alyeska's Operations Control Center were required for the shutdown, along with coordinating with multiple organizations that work on the trans-Alaska oil pipeline and with the North Slope producers.

"Planned major maintenance shutdowns are a hallmark of our wholistic and innovative approach to integrity management," said Brigham McCown, Alyeska president, prior to the shutdown. "These actions demonstrate the care and attention TAPS' people place into understanding our dynamic operations in Alaska's unique environment so we can continue to operate this critical piece of infrastructure for Alaska and our country for years to come."

Work scheduled for the shutdown included:

•Removal of piping previously used to inject drag reducing agent at Pump Station 1 in Prudhoe Bay, replacing it with 48-inch straight piping.

•Installation of new actuators on Pump Station 1's two large oil tanks, the third phase of a four-part project to replace the tank's input and output valves.

•Installation of an 87-foot section of 48-inch piping between two valves at Pump Station 7 at milepost 43 on the Elliot Highway north of Fairbanks. This isolates a section of station piping no longer needed for operations. Pump Station 7 is not currently used to pump oil.

•Systemwide upgrading of Alyeska's safety integrity pressure protection system.

•Other work including valve work and testing and cabling repairs. ●

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HILCORP PODS

sidetrack candidates to return the unit to production. The company said those targets were the Hemlock and Tyonek G zone oil and Tyonek gas reservoirs. The A-10RD and A-09RD from the Monopod at the Trading Bay unit were identified as possibilities for the sidetrack.

In the 2021 POD, Hilcorp said it plans to progress the NTBU field study "to further reduce uncertainty of subsurface oil and gas opportunities and incorporate new data acquired from planned sidetrack operations" during the plan period.

The company said that upon success of the proposed sidetrack, it anticipates that the NTBU will be returned to production.

The planned sidetrack from the Monopod Platform well in the Trading Bay unit, likely the A-10RD, would target the Tyonek gas sands, with the producing interval to be within the NTBU boundary. ●

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OIL SEARCH

immediate future.

Tom Stokes, director of Alaska's Division of Oil and Gas, told Petroleum News at 12:30 p.m. on July 19, he had just gotten off the phone with an Oil Search Alaska, or OSA, executive who had called him with assurances that "nothing has changed" on the development timeline of the Pikka project. The goals remained the same.

Still, Australia-based Santos Ltd., a big regional player which has acquired several energy assets in that area over the last few years, is pushing hard to get Oil Search Ltd. to sell, which wouldn't mean the Pikka project would get cancelled, but any time a field gets a new owner, it can create a delay. And Santos is a regional player, who would likely seek a buyer for Pikka.

ConocoPhillips has made it clear it is in acquisition mode and with Pikka and the other OSA western North Slope acreage smack dab in the middle of its operating area, ConocoPhillips would definitely be a potential buyer.

But a sale of any kind would likely mean a one-year delay in Pikka development.

Board snubs Santos

When asked in the Q&A session of the July 19 conference call if they had received any purchase offers, Oil Search Chairman Rick Lee said they had not. Hours later Santos revealed that it had made an offer and had been in non-binding negotiations with Oil Search.

The next day, on July 20, Oil Search issued two ASX announcements, clarifying its position and saying in one that it had "recently received a confidential non-binding and indicative change of control proposal."

The proposal, the company said, "has been carefully assessed" by Oil Search's board and senior management — "excluding Dr. Wulff" — and its "advisers Goldman Sachs and Macquarie Capital, as well as legal advisers Allens."

Following that assessment, the proposal was rejected as the "terms and value" were "determined to not be" in the best interest of Oil Search shareholders.

In its other July 20 release, Oil Search said following Santos "disclosing details of its non-binding indicative change of control proposal that it is always open to receiving and engaging on any proposal that is in the best interest of shareholders. Oil Search agrees with Santos that there is strategic logic in a combination of the two companies."

However, the company said the terms of any such combination need to be fair for Oil Search shareholders and those in Santos' original proposal were "demonstrably not."

Furthermore, Oil Search said it had "communicated to Santos that it is open to receiving a revised proposal which more appropriately reflects the value which Oil Search would bring to any combined entity. At this stage no such proposal has been forthcoming."

Clarification on Alaska

So, what did Lee and other Oil Search executives say about Pikka in the July 19 conference call?

In his opening remarks Lee said, "the board looks forward to working with Peter to ensure that production projects in Papua New Guinea and development of initiatives in both PNG and Alaska remain on track and on budget."

But one of the strongest clarifications stemmed from questions asked by RBC analyst Gordon Ramsay. Following is that Q&A segment:

GORDON RAMSAY: Thank you very much. I just want to say I've known Keiran for a long time and I've seen nothing but a professional, dedicated attitude towards his job and the industry. So, I'm obviously somewhat perplexed by all of this. I just want to clear up one thing that's come through on this call and that's related to the timing on the Pikka project in Alaska. I've asked this on calls before and Keiran has answered me numerous times about the timing. My understanding was the goal was to do the sell-down and FID (final investment decision) of the project before the end of this year. I just heard on the call that there is now no timing on this project. Is that correct?

PETER FREDRICSON: The answer to that question is that you could put a time on anything, a definitive date in the diary and then if you determine that you're going to go ahead with that, with whatever you want to do at that date, without reference to anything else, then the outcome could be suboptimal. We've always said that we wanted to ensure that both ourselves and Repsol, indeed, want to ensure that we have taken some of the risk of this project off our own balance sheets. That has begun, that process has begun in the context of the sell-down of an equity holding, an equity interest of between 14% and 15% for each of us. That's a process that we have been running and we are running.

But we're not going to put ourselves in a position where we say that it has to be completed by 1 November to go to FID, just so that we go to FID on that date. What we've said is we will go to FID when we've got the appropriate risk allocation and funding in place and that may not be 1 November. You work for an investment bank that works on these sorts of projects all the time and we know that they don't always run to a timetable like a bus. Well, maybe some buses don't run to timetables either, but you know what I'm saying.

So, at the end of the day, the most important thing for us is not the timetable but is getting the funding structure right. We think that adds most value for our shareholders. We don't think a delay in FID from a date in November this year is particularly value decretive, in fact we don't see it as value decretive at all, to be fair. So, from our perspective, we want to get the funding right. That's both ourselves and our partner.

GORDON RAMSAY: Just to confirm, this is completely independent of Keiran leaving the company? … is the fact that he's leaving the company … had any effect on the timing? (Note: Keiran Wulff initially headed Oil Search Alaska before being appointed managing director of Oil Search Ltd. in February 2020. He was a strong proponent of Oil Search's investment in the state.)

see **OIL SEARCH** *page 6*

EXPLORATION & PRODUCTION

US rotary rig count gains 5, now at 484

The Baker Hughes U.S. rotary drilling rig count was at 484 the week ending July 16, a gain of five from the previous week's count of 479 and up by 231 from 253 a year ago.

When the count bottomed out at 244 in mid-August last year, it was not just the low for 2020, but the lowest the count has been since the Houston based oilfield services company began issuing weekly U.S. numbers in 1944.

Prior to 2020, the low was 404 rigs in May 2016. The count peaked at 4,530 in 1981.

The count was in the low 790s at the beginning of 2020, where it remained through mid-March, when it began to fall, dropping below what had been the historic low in early May with a count of 374 and continuing to drop through the third week of August when it gained back 10 rigs.

The July 16 count includes 380 rigs targeting oil, up by two from the previous week and up 200 from 180 a year ago, 104 rigs targeting gas, up by three from the previous week and up by 33 from 71 a year ago, and no miscellaneous rigs, unchanged from the previous week and down by two from a year ago.

Thirty-two of the rigs reported July 16 were drilling directional wells, 434 were drilling horizontal wells and 18 were drilling vertical wells.

Alaska rig count up by one

Wyoming (13) was up by three rigs from the previous week and Oklahoma (29) was up by two.

Alaska (5) and Louisiana (54) were each up by a single rig.

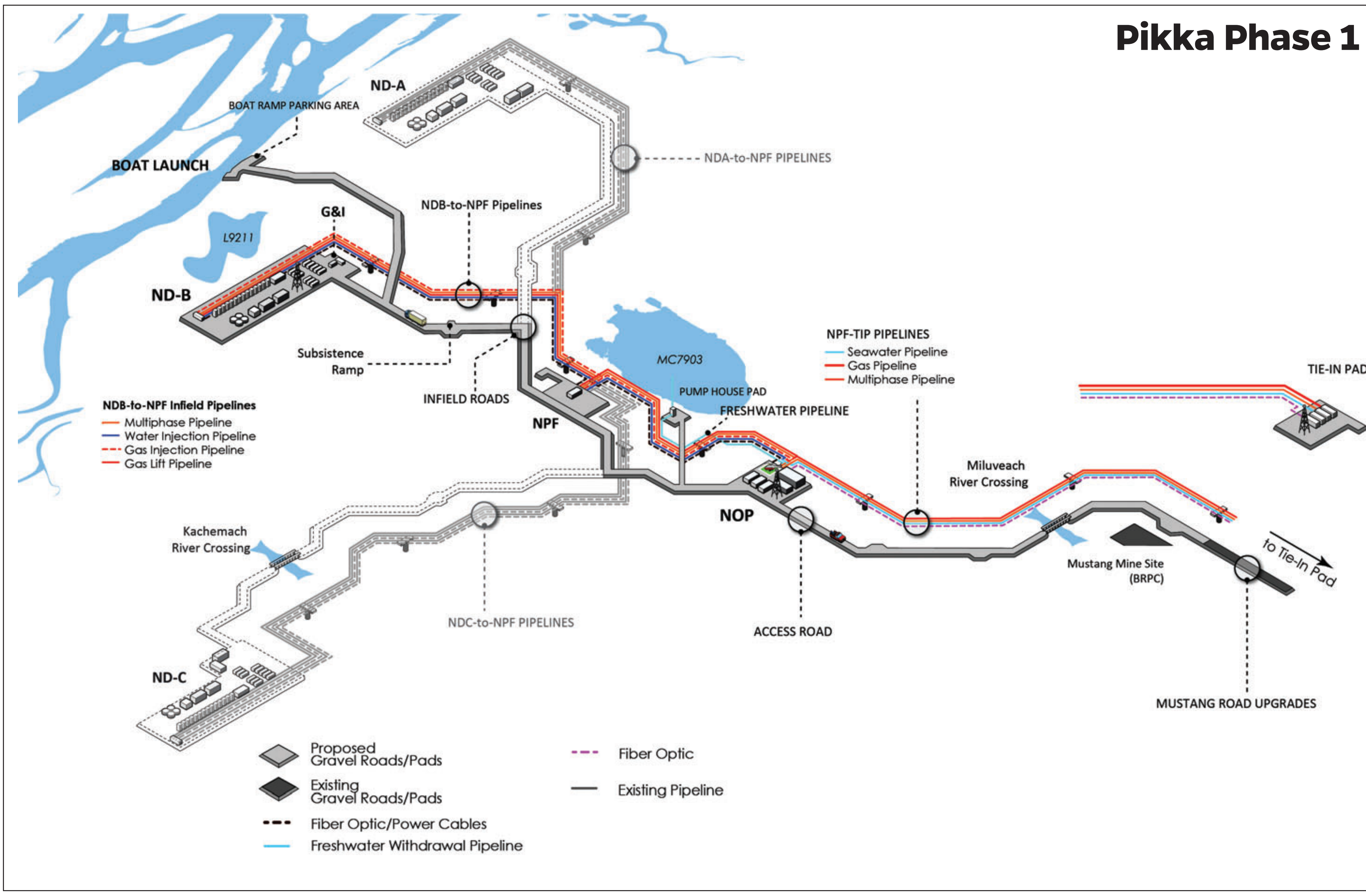
Texas, with the most active rigs in the country (222), was down by two from the previous week.

Rig counts in all other states were unchanged from the previous week: California (6), Colorado (12), New Mexico (75), North Dakota (18), Ohio (10), Pennsylvania (18), Utah (10) and West Virginia (10).

Baker Hughes shows Alaska with five rigs active July 16, up by one from the previous week and up two from a year ago, when the state's count stood at three.

The rig count in the Permian, the most active basin in the country, was up by one from the previous week at 238 and up by 114 from a count of 124 a year ago.

—KRISTEN NELSON



OIL SEARCH (ALASKA)

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OIL SEARCH

PETER FREDRICSON: No, and again, in the time that I've been with Oil Search and sat in meetings with Keiran, we've talked more about getting the funding structure right than we have about a date. Certainly, people have had in mind a date, but I don't think we've ever been in a position where we've said, damn the horses, we'll go on the date, no matter what. A date has been there for guidance, but a date is not — we're not absolutely wedded to a date. We are wedded to a structure for funding and we've got to get that right.

GORDON RAMSAY: Got you. Okay, thanks.

Fredricson's earlier Alaska comments

In his opening remarks Fredricson said the following about Alaska: "We'll work with our partners to take Papua LNG into FEED next year, with the target for FID in 2023 and first gas in 2027. We will work with our partner Repsol on achieving an appropriate funding structure for our Alaska project, prior to committing to FID. That includes the work we are currently doing on a possible joint sell-down of equity in the project, consideration of the sale of mid-stream infrastructure within the project and reviewing relevant markets for an appropriate level of debt financing to support the project."

Passion for Alaska?

Saul Kavonic, an analyst from Credit Suisse, also asked questions about Alaska and the impact Wulff stepping down would have on Pikka development. Following is some of what he asked in the Q&A session:

SAUL KAVONIC: The target sell-down, can you just confirm if you are still targeting sell-down and FID for Alaska in the second half of this year?

PETER FREDRICSON: Saul … the message we've been trying to get across in respect of FID for Alaska is that it's not targeted to a specific date. If the market has felt that that was the case in the past, it's certainly not the case today. FID for that project will be dependent on ourselves and our partners, Repsol, agreeing that we've achieved an appropriate sharing of risk with other investors, either by way of an equity sell down, or by way of a mid-stream infrastructure sell down and appropriate levels of funding available to see the project through to first oil. Those are the things that come first. When we get to that point, then we will consider FID at that point. But we're not constrained here by any targeted date whatsoever.

SAUL KAVONIC: Understood. A follow-up for that, Peter, if I may. Keiran was obviously known for being very passionate about Alaska and driving that through the business. Do you have the same level of passion for the Alaska project?

PETER FREDRICSON: I think the business has the same level of passion for the project, from the board, through the ELT (executive leadership team), through to people working in the business.

Wulff's resignation

SAUL KAVONIC: Can you confirm that you've not had any concerns regarding the CEO's behavior raised to you prior to middle of June this year?

RICK LEE: I can confirm that we responded to a whistle-blower statement which alerted to the board the behavioral issues. I think that was around the middle of June. We've been working hard in the period since then. We have certainly, over a long period since Keiran's appointment, we have certainly supported him in what was a pretty challenging role from day one. Our priority was to protect the company to make the changes that were made and pursue the strategy that was articulated last November. I think through that period we had absolutely no concerns whatsoever.

DANIEL BUTCHER, CLSA analyst: Did Keiran resign for health or was he going to be asked to leave anyway for his overbearing management style? If it was for health, why mention the (whistleblowers') letter? If it's the latter, why say he resigned?

RICK LEE: Look, he resigned on medical grounds. We can't go into detail of his medical condition for obvious reasons, but we had alerted him to the issues raised in the whistleblower statement and entered into discussions with him and that was the result of those discussions.

Petroleum News has confirmed through its trusted sources that Wulff had a long-term medical condition which had taken a turn for the worse in June.

It is well known that Wulff took over as managing director of Oil Search Ltd. just as the COVID-19 pandemic got underway and right before a plunge in oil prices. As a result, he was forced to lay off approximately one-third of the company's staff, engendering hard feelings.

He was considered brilliant, a visionary and decisive by those who were close to him. ●

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STP APPROVAL

and quality to bolster hydrocarbon extraction efficiency from Pikka unit reservoirs, which include the massive Nanushuk reservoir.

On June 23, 2020, Oil Search Alaska, a subsidiary of Oil Search Ltd. and operator of the Pikka unit, applied for an easement under AS 38.05.850 to construct and operate a seawater treatment plant, or STP, within the North Slope Borough on the eastern shore of Oliktok Point as a part of the Pikka development project.

Oil Search Alaska, or OSA, submitted a second easement application in August of that year to construct and operate a 20-inch make-up water pipeline, a 12-inch fuel gas pipeline and a fiber optic cable, collectively referred to as pipeline infrastructure.

The pipeline infrastructure, the division said in its proposed determination, will "facilitate the transport of treated seawater from the STP to a tie-in pad approximately 18 miles south of Oliktok Point."

The proposed easements are in the ConocoPhillips-operated Kuparuk River unit.

On Dec. 18, the division issued a conditional easement for the STP, subsequently revising the easement on Jan. 28. On April 5, the division issued a conditional easement for the pipeline infrastructure. Both decision documents for the conditional easements required OSA to submit additional project information as it became available and prior to receiving final approvals to construct and operate the facilities.

The reason for Stokes issuing a proposed director's determination was to summarize the agency's analysis of the additional information previously requested of OSA in the conditional easements prior to entering the next phase for the two projects.

STP to be built off-site

The STP will be constructed off-site on a submersible barge and transported to the North Slope via sealift during the open water season. Upon arrival, the barge will be positioned on the east side of Oliktok Point and ballasted down to rest on the ocean floor. Gravel fill will be discharged over the area surrounding the barge and contained with sheet piling. Screeding of the seafloor will occur initially during the open water season when the STP arrives on location and later during maintenance.

The STP will be equipped with a seawater intake structure, filtration system, power generation and heating system and will be fully functional following connection to the yet-to-be constructed communications systems, fuel gas and seawater pipelines.

The proposed dimension of the surface area of the gravel pad and STP barge is 6.83 acres. The initial construction easement will consist of 30.3 acres. The operational easement will consist of 13.0 acres, including buffers.

STP lines, fiber optic

The 16-inch seawater pipeline, 6-to-12-inch fuel gas pipelines and fiber optic cable will be placed on new horizontal support members, or HSMs, and will require approximately 2,115 new 12-to-20-inch-diameter vertical support members, or VSMs, spaced 55 to 65 feet apart, per the director's proposed determination.

The first 0.2 miles of piping will be placed below existing gravel fill and stretch from the east side of Oliktok Point to Eni's Oliktok production pad. From there it will run above ground, generally parallel to and within 500 feet of the existing Nikaitchuq pipeline, Oliktok road and Kuparuk road.

The STP pipelines project is expected to require a 626.6-acre construction easement and a 221.18-acre final operation easement once fully constructed.

The pipelines will be centered on the VSMs along the pipeline alignment route. The construction easement will be 300 feet wide and the operation easement will be 100 feet wide, with a few exceptions around existing obstacles.

Construction activities for the project will include driving sheet piles; driving piles; trenching; excavating; placing gravel fill; screeding; installing VSMs, pipelines and fiber optic cable; and constructing ice roads and pads.

Pipeline construction will take place using ice roads and existing gravel roads for the 2022-23 and 2023-24 winter and summer construction seasons.

VSM locations will be surveyed and drilled in the winter, followed by installation into the pre-drilled holes using approximately three to six cubic yards of sand slurry per VSM, resulting in discharges to a total of 0.05 acres of jurisdictional waters of the U.S.

The minimum embedment for VSMs will be 15 feet in depth or to enough depth to ensure pipeline construction and operation safety, including potential frost jacking, consistent with North Slope best management practices.

VSM drilling will occur from ice roads. Pipelines will be placed during the following winter season, with testing and startup activities occurring in the second summer construction season.

Prior authorizations

Prior authorizations granted for the STP project were as follows:

• ADL 421488 — STP easement director's decision and entry authorization, approved Dec. 18 and revised Jan. 28.

• ADL 421526 — Pipelines and fiber optic cable easement director's decision and entry authorization, approved April 5.

• ADL 421348 — Tie-in pad easement director's decision and entry authorization, approved June 16.

Process hazard analysis

The three director's decisions on the STP project all required OSA to submit more detailed information on the project prior to starting construction. The information included reasonably foreseeable cumulative impacts on the Oliktok Point area and more detailed engineering documents.

OSA submitted a cumulative impact assessment, a schedule for the Pikka development, a fabrication and construction execution plan, a conceptual design basis, equipment lists and arrangements, and process descriptions.

Due to "timing, safety, and other considerations," the division determined a process hazard analysis was "warranted to provide assurance throughout the public process of the applicant's commitment to deliver a safe and operable new STP facility."

Collectively, the division said, the cumulative impact assessment, process hazard analysis, and supporting data allowed it to further analyze the potential impacts of the project and summarize its analysis in its July 20 proposed determination.

However, the STP and pipeline infrastructure projects will not be fully sanctioned until a public process is completed and a front-end engineering and design, or FEED. package is reviewed and accepted by the division.

Process hazard analysis

The process hazard analysis, or PHA, is a documented plan of how to minimize risks and improve safety through engineering and administrative measures to the previous defined plans using best available technology.

The division received a PHA report from OSA on June 23.

The division said the analysis was conducted in compliance with the expectations and regulatory premise outlined in the Occupational Safety and Health Administration's regulation on process safety management of highly hazardous chemicals, which dictates requirements for preventing or minimizing the consequences of catastrophic releases of toxic, reactive, flammable or explosive chemicals.

The division said the scenario-based review was performed by a third-party consultant trained in applying structured and systematic methods to identify risks and consequences for the new STP operations.

The processes identified for the STP project included seawater intake, filtration, heating, deaeration, chemical treatment and transport through the pipelines. Utility and chemical systems processes were also discussed.

Division's conclusion

The division said it reviewed the supporting documentation provided by OSA and considered the reasonably foreseeable impacts that could occur through the life of the STP project.

Based on the information provided by OSA, a review of documents and case-file records, and the analysis presented in its determination on the division's website, the director "proposes to approve the construction of the STP project" and recommended the following actions be taken:

1. The division shall solicit written comments and provide for public notice regarding its determination. To solicit public comments, the agency will place public notices in newspapers of general circulation (Anchorage Daily News and Arctic Sounder). The public notices will be posted in the state of Alaska Online Notice System and the division newsroom, and in post offices in Barrow, Deadhorse, and Nuiqsut.

2. Following completion of the public comment period, and consideration of all comments received, the director will make a final determination on whether the construction of the STP and pipeline infrastructure projects are in the state's interest. As part of its decision, the director will analyze whether OSA is in compliance with all requirements from the division's three decisions. Assuming the director concludes the project is in the state's best interest, the director will issue to OSA a notice to proceed "containing specific terms and conditions necessary to protect the state's interest."

—KAY CASHMAN

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UTILITIES

CINGSA files for 2% interim increase

Cook Inlet Natural Gas Storage Alaska, CINGSA, has filed with the Regulatory Commission of Alaska for an interim and refundable tariff increase of 2%, effective Aug. 1, and a proposed permanent rate increase based on the outcome of the proposed cost of service study, an increase which CINGSA President John Sims told RCA in the July 1 filing would be an increase of some $1.9 million or about 10%.

State, federal and RCA precedent entitles CINGSA to rates including a return sufficient to support the company's continued financial integrity, Sims said, and "rates in effect today do not meet that legal standard."

He said CINGSA has demonstrated that current rates "are confiscatorily low," and the Alaska Supreme Court "has held that utilities should be protected against irreparable harm if, in fact, interim and refundable rates are too low."

Evidence presented by the company shows, Sims said, "that the revenue resulting from CINGSA's current rates is substantially below the amount necessary for CINGSA to recovery its current costs of providing service (including its opportunity to earn a return on its capital investments)."

The request for the interim 2% increase is based on the likelihood that current rates will remain in effect for 450 days, which is the statutory deadline for adjudicating the case.

He noted that RCA has recognized that CINGSA plays a critical role in the gas deliverability infrastructure in Cook Inlet, and said on April 10, when the Anchorage area was hit by an unseasonal Arctic cold blast, "the supply coming from CINGSA represented 66% of the demand of its largest customer."

CINGSA currently has three firm storage service and five interruptible storage service customers, Sims said.

—KRISTEN NELSON

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BP REVIEW

an increase in the amount of renewable energy produced. However, given the fact that the decline in carbon output was related to a major plunge in economic activity, this carbon decline appeared likely to be transitory, with carbon emissions increasing again as the world economy recovers.

Picking up on this point, panel chair Gillian Tett, U.S. editor at large for the Financial Times, expressed skepticism about efforts to achieve the desired restraints on a warming climate.

"On current trajectory, as far as I can see, we're not going to hit the Paris climate change accord goals, which is very, very alarming," Tett said.

A push from society

Nigel Topping, UK representative for the upcoming UN climate change conference in Glasgow, expressed a somewhat more optimistic note in terms of climate targets, saying that society is likely to push much more strongly for climate action, as more climate reports appear in the near future, and as people experience weather phenomena such as heat domes and early hurricanes. Shareholders are starting to apply pressure to energy companies, he said.

"There will be stranded assets and huge value disruption … if an incumbent company is still allocating capex on the basis of bad projections of the future, that just leaves it open to the disrupters to reap the spoils," Topping said.

Paul Bodnar, global head of sustainable investing at Blackrock, a major asset management company, said that, while investors tend to be interested in a company's long-term performance, "one takeaway from this year's report is that energy systems are sticky, and it takes time to transition them." An energy company has to figure out how to position itself for the energy transition that needs to happen over the next decade or two, while investors also need to consider the same issues, with the direction of decarbonization pretty clear.

"We want to see evidence that companies are taking this seriously, and that they have a plan for thriving in a world that is moving to net zero," Bodnar said.

At the same time the world runs on energy and energy must become available to more and more people. And company financial performance needs to be considered in the context of various forms of energy, not just oil and gas or electricity, Bodnar said.

Change is difficult

But shifting an entire energy economy

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BP REVIEW

is hard, in particular because many of the carbon emitting assets such as passenger cars, power plants, steel mills and cement factories are long-life assets, Bodnar said. While, on the one hand investors are interested in opportunities for building the new climate economy, the investors also need to understand at what speed the energy transition may be possible. How are the existing emission generating assets going to be taken offline?

For example, long-term contracts and tariffs shield most of the coal industry from competition with renewables. So, rather than just pouring money into investments in the green energy, it is necessary to work with the world of energy policies, to understand how to reduce emissions by accelerating the rate of capital stock turnover in the capital economy, Bodnar suggested.

Topping commented that there has to be an interplay between the market and policy makers, with policy makers becoming serious about how to take polluting assets out of the energy system.

"We haven't really grappled with that question enough yet," he said.

BP's strategy

Giulia Chierchia, BP executive vice president for strategy and sustainability, commented on BP's approach to the energy transition. BP sees this as an integrated play, with the company bringing energy systems together and playing a critical role in creating global value chains. For example, it is necessary to build up value chains for hydrogen production and transportation, moving production from grey through blue to green hydrogen.

Paul Bodnar, global head of sustainable investing at Blackrock, a major asset management company, said that, while investors tend to be interested in a company's long-term performance, "one takeaway from this year's report is that energy systems are sticky, and it takes time to transition them."

"That's something that we can do," Chierchia said. "We are aiming to actually create those value chains and drive that integration."

Grey hydrogen, produced from natural gas, is relatively carbon intensive, blue hydrogen involves carbon sequestration and green hydrogen is produced from the electrolysis of water. BP views hydrogen as extremely important in the energy transition, in particular for heavy duty, long haul transportation. The company sees blue hydrogen becoming competitive with grey hydrogen by the end of this decade, with green hydrogen becoming competitive a few years later at locations with good solar or wind resources, Chierchia said.

BP also thinks that it can drive attractive returns from investments in renewables, including solar and offshore wind. The company has communicated its hurdle rates for investments in renewables and will only invest if those hurdle rates can be met, Chierchia said.

Chierchia also commented that, although in the future less oil and gas will be needed, the continued running of the energy system will continue to require some oil and gas. BP has announced a strategy to reduce its oil and gas production by 40% by 2030, she said. Divestments from oil and gas will support the company's investments in low carbon alternatives. Compared with smaller companies, BP is in a privileged position to carry out the complex shaping of those new global value chains, Chierchia said. Moreover, given societal pressures, all companies will come under scrutiny over their long-term emissions performances.

Carbon pricing?

Asked about whether carbon pricing will prove an essential factor in pushing the energy transition, Chierchia said that BP strongly supports carbon prices and carbon border adjustments, as one mechanism, but not the only mechanism, in the drive to change the energy system. Topping commented that carbon pricing can work very effectively in some sectors, such as power generation. However, it does not work so well in some other sectors — for example, it would simply add to the cost of running a car, an activity which is more of a behavioral decision. For reducing carbon emissions from car use it is more effective to apply regulations for factors such as fuel efficiency and to introduce policies for ending the use of internal combustion engines, he suggested.

Tett commented that, given the scale of the climate change conundrum, it is necessary to move away from assumptions that recent economics should drive economic models for the future. A wider perspective is needed, with high levels of collaboration and difficult tradeoffs. Coupled with this, the energy sector will need to change, but will it change fast enough, she questioned.

—ALAN BAILEY

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Petroleum news

Oil Patch Bits

Diamond Grid and Ace Hardware in agreement

John Horjes, executive director for Diamond Grid USA & Canada, announced July 13 that Diamond Grid is now an approved vendor for Ace Hardware. "We are pleased to join Ace Hardware as a vendor to their many locations in the United States, Canada, and around the world.

"Our EDI system is currently 'on-boarding' with Ace, and we expect to be available for purchase within 30 days."

Ace Hardware Corp. is the second-largest dealer-owned cooperative in the United States. The co-op pools buying and promotions for its 5,100-local hardware, home center and lumber stores located in all 50 of the United States as well as in 65 foreign countries and territories. Ace's emphasis on service and modern retailing techniques has helped locally owned and operated Ace retail stores confront intense competition from such home improvement powerhouses as Home Depot and Builders Square. The co-op manufactures its own line of paints and also supplies other products under the Ace brand.

Diamond Grid is a global market leader in surface stabilization and erosion control systems. With manufacturing in 12 and distribution in over 20 countries, Diamond Grid can be found used in many projects and industries worldwide, to include: DIY, landscape, construction, golf, equestrian, livestock, state, federal, roads, aviation, oil, power, mining, marine, transportation and freight forwarding.

For more information visit www.acehardware.com or www.diamondgrid.com.

JOHN HORJES

Companies involved in Alaska's oil and gas industry

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

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LNG VENTURE

net-zero greenhouse gas emissions within three years of starting 30 years of commercial operations in 2027 by employing hydroelectricity, energy efficiency, carbon offsets and potential carbon capture and storage.

The project will rely heavily on an electric-motor technology in refrigerant compressors, using electricity from government-owned BC Hydro for the liquefaction process instead of LNG's reliance on natural gas-powered turbines.

A floating liquefaction facility is planned for the village of Gingolx, a coastal community 50 miles north of Prince Rupert.

The project, which would generate 4,000 constructions jobs, is designed to achieve initial peak exports of 12 million metric tons a year of LNG, compared with 14 million mt by LNG Canada and 2.1 million mt from the Woodfibre LNG project at Squamish, just north of Vancouver.

One other LNG proposal is considered by industry analysts to remain viable — the Cedar LNG partnership in Kitimat between Pembina Pipeline and the Haisla Nation.

A 135-page document filed earlier in July with the B.C. Environmental Assessment Office said the Nisga'a Treaty signed in 2000 with the governments of Canada and B.C. gave the Nisga'a control over about 780 square miles of territory in northwest B.C.

"Attracting an economic base to our treaty lands … has long been a priority for the Nisga'a Nation," said community president Eva Clayton in an announcement.

"This is why, for close to a decade, our nation has worked to attract a world-leading LNG project … and why we are proud to commence the formal regulatory process."

Calgary-based Birchcliff Energy is leading the gas producers known as Rockies LNG, which hired Houston-based Western LNG to help guide the plans.

FID in 2024

The Ksi Lisims proponents expect to make a final investment decision in early 2024, claiming they have learned lessons from the stumbles that have scuttled about 20 proposals in the last decade to export LNG from B.C. to Asia.

In its regulatory filing Ksi Lisims said it aims to revive one of two now-defunct pipeline plans — one by TC Energy and one by Enbridge — that accompanied other failed LNG proposals to ship gas from B.C.'s northeastern fields to liquefaction facilities.

They include TC Energy's Prince Rupert Gas Transmission proposal, which got shelved in 2017 after Malaysia's state-owned Petronas scuttled another mega-LNG proposal.

In the meantime, TC Energy has continued work on its Coastal GasLink pipeline to support LNG Canada's terminal site, despite resistance from a group of Wet'suwet'en Nation hereditary chiefs, who organized road and rail blockades in early 2020 to shut down construction of the pipeline.

TC Energy and Enbridge say they have prepared routes that would not have to cross the Wet'suwet'en land.

The Ksi Lisims document says their undertaking will contribute to economic reconciliation between First Nations and the governing provincial and federal governments by "implementing the Nisga'a Nation's authority over economic development on lands they own."

The regulatory application said natural gas makes sense as a transition fuel to help displace coal-fired electricity generation plants in Asia.

"Exporting LNG from Canada adds natural gas supply to the global gas market, enabling governments to phased out coal use and to supply growing energy demand," the filing said.

—GARY PARK

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CARBON CAPTURE

tial six years, said Shell's Canadian President Susannah Pierce.

She said the company has "a pretty aggressive goal with respect to (CCS), which is clearly something that we need for projects or investments or assets that really can't eliminate emissions on their own."

Pierce acknowledged there is some public cynicism surrounding Shell's commitment to lowering emissions and tackling climate change.

"There's always going to be those who will never believe what you say and that's fair," she told the Globe and Mail. "We're an old company that has had a history of producing oil and gas."

But she insists Shell's intended transition to a clean energy strategy, which has been demanded by company investors, will be publicly updated every two years.

"If we fail to deliver, then we have to come to terms with that when we meet at our (annual general meetings)," Pierce said.

Under pressure from climate-minded investors, many of whom are unloading their oil sands holdings from the world's third-largest crude reserves, Polaris would account for only a fraction of emissions from the northern Alberta resource which accounts for an estimated 70 million mt a year of CO_2, about 10% of Canada's total emissions.

C$75 billion

Two of Canada's top oilpatch chief executive officers — Mark Little of Suncor Energy, and Alex Pourbaix of Cenovus Energy — believe it will cost about C$75 billion over the next 29 years to zero out greenhouse gases from the oil sands.

They also warn that a large portion of the costs would have to be carried by taxpayers, while many other loose ends have to be tied up.

Little told Bloomberg that achieving the 2050 target, with about half the emission cuts coming from CCS at the oil sands, could require as much as two-thirds government capital to match the strategy being introduced in Norway.

"We haven't been able to find any jurisdiction in the world where (CCS) has been implemented, where the national or state governments are not very significant partners in the investment," said Pourbaix.

"I don't think any of us would ever be in a position to go at this on our own."

Little said the Canadian industry can "bury our heads in the sand and become a victim or we can actually deal with it."

Initial backing

The emerging plans to shrink emissions from the oil sands also have the initial backing of companies such as Canadian Natural, Imperial Oil (69.6% owned by ExxonMobil) and MEG Energy (a Chinese state-controlled company).

Little told Bloomberg that achieving the 2050 target, with about half the emission cuts coming from CCS at the oil sands, could require as much as two-thirds government capital to match the strategy being introduced in Norway.

Little said the heaviest costs of capturing CO_2 range from C$50 a metric ton for industries that emit high concentrations to "several hundred dollars a ton" for direct capture from the atmosphere.

And that plan does not account for so-called Scope 3 emissions which are generated by motor vehicles, aircraft, homes and factories, which burn fuels from the oil sands.

Pierce said Shell is aiming to use more renewable energy at Scotford, following its own lead to start up Europe's largest hydrogen electrolyzer at an energy and chemicals complex in Germany.

"Shell actually sees that the hydrogen market could grow close to 50% of today's oil demand by 2050, so we see a huge opportunity, primarily by looking at the harder-to-abate sectors," she said.

—GARY PARK

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PRUDHOE DRILLING

and up to one producer and one injector from the Z pad."

"We are pleased to have support from our working interest partners to drill several Prudhoe Bay wells in the coming months," Luke Saugier, Hilcorp senior vice president, Alaska, said in a July 19 email statement. "The last year has been challenging but I'm proud of what our team accomplished, including increasing production at Prudhoe Bay. We look forward to working with our Prudhoe Bay partners, ConocoPhillips, ExxonMobil and Chevron, to continue to safely and responsibly develop Alaska's natural resources."

The 2021 POD is effective May 1, 2021, through April 30, 2022.

Hilcorp took over BP's interest at Prudhoe in 2020 as part of its acquisition of BP's Alaska assets. The field's other working interest owners are ConocoPhillips Alaska, ExxonMobil Alaska Production and Chevron U.S.A.

Western satellites

There are five western satellites at Prudhoe: Aurora, Borealis, Midnight Sun, Orion and Polaris.

In its March approval of the original POD for the western satellites the division said Aurora, Borealis and Midnight Sun produce primarily from the Kuparuk River formation, while Orion and Polaris produce higher viscosity oil from the Schrader Bluff formation.

Data from Hilcorp's original POD application show average 2020 calendar year daily oil production from the satellites was 5,315 barrels per day at Aurora; 5,558 bpd at Borealis; 973 bpd at Midnight Sun; 3,928 bpd at Orion; and 6,193 bpd at Polaris. Total western satellite production averaged 21,967 bpd last year.

By comparison, in its POD for the initial participating areas, Hilcorp said oil production averaged 60,968 bpd in 2020, with 16,538 bpd of natural gas liquids. There is no NGL production from the western satellites.

Western satellite development began in the late 1990s with Midnight Sun production beginning in 1998 and Polaris production in 1999, followed by Aurora in 2000, Borealis in 2001 and Orion in 2002. Regular production from the IPA, discovered in the late 1960s, began in 1977, following completion of the trans-Alaska oil pipeline.

Wellwork, workovers

In its January 2021 western satellite POD proposal Hilcorp said it anticipated completing up to 10 workovers or recompletions, and listed 10 candidates to be evaluated, including work at four of the five participating areas:

•Two Z Pad recompletions from Ivishak to Kuparuk formation in the Borealis PA.

•One rig workover for profile modification in the Midnight Sun PA.

•Two rig workovers to repair mechanically failed wells and two rig workovers to add additional injection in the Orion PA.

•Three rig workovers to add additional injection in the Polaris PA.

The company also anticipated reinstating the GC-2 B slug catcher sand jetting system and undertaking early studies aimed at defining opportunities in the western satellite area gathering infrastructure.

Long range, Hilcorp said in January, it "continues to evaluate future drilling opportunities and plan to continue to evaluate potential undeveloped resources." The company also planned to evaluate new pad development options, polymer injection, I Pad expansion and partial pad separation. ●

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OIL PRICES

sharp V-shaped recovery that accelerated skyward in July 21 trading. ANS surged $3.13 higher to close at $72.25, Brent and WTI each gained $2.88 to close at $72.23 and $70.30, respectively.

It seemed odd that the mini crash happened at all in the face of a predominance of bullish factors present as the week began, but July has been a jittery trading month after an expected routine production adjustment meeting of the Organization of the Petroleum Exporting Countries and affiliated producing counties came off the rails over an internal disagreement.

The meeting was indefinitely postponed, and pundits wondered if the OPEC+ alliance was in danger of coming apart, leading to a free-for-all opening of the taps amongst the group. A resolution of the dispute mid-month should have been a calming factor, particularly considering that the agreed production boost of 400,000 barrels per day for August was in line with analysts' early July expectations.

The sudden resolution had however piled one surprise atop another, and the jolt shook the confidence of bullish traders that found themselves rethinking the market entirely as prices hit a jagged pothole before extending a gradual slide into the weekend preceding the mini crash.

Going into the July 4 weekend, ANS notched a post-COVID high, up 30 cents to close at $76.83. Despite intraday turbulence during the month, that closing high was not again to be matched.

Bullish factors

The 19th OPEC and non-OPEC Ministerial Meeting, which replaced the 18th meeting called off earlier in the month, was held via videoconference July 18, OPEC said in a release.

OPEC said market fundamentals were strong, with oil demand showing clear signs of improvement and with Organization for Economic Cooperation and Development stocks falling as economic recovery continued in most parts of the world thanks to accelerating vaccination programs.

The participating countries in the OPEC+ Declaration of Cooperation delivered 113% overall conformity to the production adjustments in June, OPEC said.

The meeting resolved to reaffirm the framework of the DOC, and the group agreed to extend the production curtailment accord reached in April 2020 until Dec. 31, 2022.

OPEC said the group would expand overall production by 400,000 bpd each month starting August 2021 until phasing out the 5.8 million production adjustment currently in place, and it would meet in December 2021 to "assess market developments and participating countries' performance."

The group will hold monthly OPEC and non-OPEC Ministerial Meetings to assess market conditions and decide on production level adjustments for the following month, OPEC said, adding that it plans to end production adjustments by the end of September 2022, "subject to market conditions."

Unrest hobbles Latin America production

Latin American problems may send oil prices higher.

There are concerns that anti-government uprisings in Latin America will negatively impact oil production in the region, according to a July 19 report on OilPrice.com.

Colombia, the fourth-largest oil producer and economy in the region has become the epicenter of broad anti-government dissent over chronic socioeconomic inequality, violence, lawlessness, corruption, and suppression of civil society, the report said.

"The COVID-19 pandemic caused poverty to rise sharply across the region and amplified the deep socioeconomic fault lines that exist sparking greater instability, turmoil and conflict," the report said. "The latest developments, notably deep dissatisfaction with the region's rightwing governments' failure to deliver economic and social progress, could spark a Latin American Spring with leftwing politicians sweeping to power across the region."

Violent anti-government marches caused onshore drillers in Columbia to shutter oil fields in May, causing production to plunge to a low of 650,884 bpd.

Oilfield invasions and community blockades of industrial facilities had been on the rise before anti-government protests erupted in late April, and from December 2020 there have been violent seizures of oil fields in the municipality of Puerto Gaitan in the Llanos Basin.

Electoral irregularities and political turmoil are testing Peru's fragile democracy — already under a long-running constitutional crisis and pandemic-magnified divisions between rich and poor.

Newly elected President Pedro Castillo said he wants greater state control of natural resources, including increased taxation.

Turmoil is also brewing in Brazil, Chile, Cuba and Haiti, while Venezuela's autocratic socialist regime appears on the verge of collapse. ●

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