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'MAN CAMP' COMPANIES ESTIMATE LNG JOBS AT 20,000-PLUS

Temporary-work-camp builders shifting focus to B.C. from Alberta

The B.C. government's projections for job creation and economic development from liquefied natural gas (LNG) have, at times, been so astronomical as to invite scorn.

There are 19 LNG projects proposed. The government has estimated that five LNG projects could generate 100,000 jobs over a nine-year period – an estimate the Canadian Centre for Policy Alternatives (CCPA) disputed in an analysis in July.

The CCPA put construction-period jobs at 2,000 to 3,000 over three years and only 200 to 300 permanent jobs. But companies that accurately gauge workforce markets might offer a more accurate snapshot of how many jobs one or two large LNG projects are likely to create.

Among the presenters at an LNG conference sponsored by AltaCorp Capital in Vancouver on August 25 were three companies that build and operate remote work camps in Canada, the U.S. and Australia.

Investors and industry players attending the conference heard that only three large LNG projects are likely to be built in B.C., with the two front-runners being Petronas' $36 billion Pacific NorthWest LNG (PNW) project and Shell's $40 billion LNG Canada project.

The smaller Douglas Channel LNG project proposed by AltaGas Ltd. (TSX:ALA) is also considered likely to get a final investment decision soon.

According to Trevor Haynes, CEO of Black Diamond Group, the Shell and Petronas projects combined would require between 19,000 and 25,500 beds (peaking in 2019) for LNG plant and pipeline construction.

That doesn't include the beds that would be needed for upstream work in the gas fields of northeastern B.C., which is harder to estimate.

Black Diamond forecasts the number at 5,000 for each LNG project.

The Prince Rupert Gas Transmission line, which would supply PNW, would have nine camps running in three segments, located strategically with First Nations partners, Haynes said.

"A key element of the competitive nature for the camp companies is how they're aligned in partnership with specific First Nations."

The Coastal GasLink pipeline, which would supply the Shell LNG plant in Kitimat, would require 10 work camps, Haynes said.

While the work camps for the pipeline and upstream gas development would be mobile and temporary, the camps planned for Kitimat and Port Edward are more like instant towns, with multi-storey condo-type dwellings. Some of the housing and infrastructure could be more permanent. At least one of the proposals includes a hotel and affordable housing.

All three companies vying for contacts in B.C. have assembled land in Kitimat and Port Edward.

Black Diamond's Pacific Lodge proposal for Port Edward, part of PNW, would be built on a 57-acre parcel a six-minute drive from the bridge to Lelu Island.

The plan includes a pub, a gymnasium, a medical centre and bus terminal that would shuttle up to 4,000 workers to and from the work site each day. Up to 1,000 units could become permanent.

At least one company has already landed a contract. Civeo, which operates in Canada, the U.S. and Australia, has a 15-month deal to develop 436 rooms, with a capacity to expand up to 2,000, in Kitimat at its Sitka Lodge for Shell's LNG Canada project.

Horizon North Logistics has land in Kitimat that it wants to develop for temporary and permanent lodging.

Its land parcel in Kitimat has three zones. One is for a temporary work camp that would house up to 1,000 workers. Two other parcels are zoned for commercial and residential development. The residential parcel includes permanent affordable housing.

"Right now you've got a shortage of hotel rooms, you've got a shortage of apartments, and we believe that we can make some money working with groups like BC Housing on residential lands," said Horizon North Logistics CEO Rod Graham.

Kitimat was designed for a larger population, so work camps housing several thousand workers are not expected to strain the town's municipal services.

One thing that is strained, however, is its housing. A multibillion-dollar modernization project at the Rio Tinto Alcan aluminum smelter resulted in a boom that stressed the community's housing inventory.

"Our vacancy rate dropped from 44% to zero, and that put pressure on housing," said Kitimat economic development officer Rose Klukas. "So for the first time in Kitimat's history, there was a need to look at social housing."

Unlike Kitimat, Port Edward, with a population of less than 600, doesn't have the infrastructure capacity to deal with an overnight explosion of up to 6,000 workers.

In an agreement with the town, PNW will provide $50 million to upgrade the town's services, like sewer and water, and $100 million in long-term tax agreements.

The town is planning to use the LNG project and work camp development as a catalyst for residential development. It will need to add at least 300 new homes for PNW's permanent workforce.

"We have three, maybe four, development companies knocking on our doorstep, with land acquisitions unfolding," said Port Edward chief administrative officer Bob Payette.

Of the three companies that are bidding on contracts, Horizon North is the only one that is fully integrated – handling everything from the manufacturing to the transportation, installation and ongoing management of remote work camps.

It owns a manufacturing plant on Tk'emlúps te Secwepemc land in Kamloops, where its modular buildings are made. Until recently, it employed up to 300 people.

But 40% to 50% of the company's business comes from Alberta, and oil's plunge recently forced the company to lay off 48 people from its Kamloops plant.

All three companies bidding on LNG contracts in B.C. have been hit by the downturn in the Alberta oilsands. But the upside of that downturn is that it promises to free up workers with transferable skills to work in B.C. It also means that companies like Black Diamond can redeploy some of their mobile housing units from Alberta to B.C.

Haynes said the number of beds deployed in Alberta has dropped from about 70,000 to 50,000, leaving 20,000 units that can be redeployed.

"We may yet see that drop by another 10,000," Haynes added.

"As you can imagine, we have seen a reduction in manpower in the greater oilsands area, and as projects in construction have come to conclusion, assets have been coming back into our yards and are available for redeployment. The economics are going to be better for the project developer than they were a couple of years ago."

Haynes estimated Black Diamond's total investment in developing the Pacific Lodge project would be $200 million to $250 million.

CANADIAN LNG EXPORT PLAN OKED

Spanish energy giant Repsol has received approval from Canadian regulators to begin exporting LNG from its under-utilized Canaport import facility in Saint John, New Brunswick.

The National Energy Board of Canada granted the company a

25-year permit to import as much as 312 billion cubic feet of natural gas per year by pipeline from the United States and western Canada, then convert it to 6 million metric tons of LNG at a new on-site facility, according to an approval letter from the National Energy Board of Canada dated September 3.

The project is one of four LNG export terminals proposed in eastern Canada, aiming to ship abundant North American natural gas to energy-hungry markets overseas.

Two projects in neighboring Nova Scotia, proposed by privately owned Pieridae and Australia's Liquefied Natural Gas Ltd, received energy board approval last month. Nineteen similar projects have been proposed in British Columbia on Canada's west coast.

In its letter, Canada's energy regulator acknowledged the deluge of recent applications, but indicated it was unlikely all would survive.

"All of these LNG ventures are faced with a robust, but limited, global market and face numerous development and construction challenges," it said.

The east coast projects, including the existing Canaport marine terminal, are well positioned to meet Europe's demands for cheap and dependable gas in the face of continuing instability in Ukraine, according to analysts.

But supply remains a major hurdle.

Quebec, Nova Scotia, New Brunswick and Newfoundland and Labrador have all imposed various forms of moratoriums on hydraulic fracturing - a process required to access shale gas deposits - over environmental concerns.

In its proposal, Repsol downplayed concerns about supply, saying it was "evaluating the prospects of sourcing feed gas supply from Western Canada and/or the United States."

But only one pipeline, Spectra's Maritimes & Northeast (M&NP), currently connects the region with the vast Marcellus shale gas deposit beneath Pennsylvania, Ohio and West Virginia.

The four new eastern Canadian plants would require nearly twice New England's current annual consumption of natural gas, as well as new pipeline infrastructure to transport it.

Recent proposals to build pipelines through the U.S. Northeast have met resistance from local environmentalists.

Canaport was built in 2009 to supply the Canadian and U.S. markets, but the shale boom in the United States has since left it underused.

SMEARED ACROSS ALBERTA SIT 63,000 ABANDONED OIL AND GAS WELLS, A NUMBER THAT HAS BALLOONED AS THE PRICE OF OIL DEFLATES.

The discards have been in the making since the 1950s, when a lack of environmental regulations truly gave meaning to the term "Wild West." Even if no more new wells are put into production, it could take up to 30 years to clean up what are known as "orphan wells," which are today usually offspring of small-time mom and pop operators who go belly up.

A former reclamation inspector with the Alberta government told me that Alberta's oil and gas well sectors aren't subject to the strict regulatory approvals or high-level policing that exist for the oil sands. Proof came on Aug. 28, when the Alberta Energy Regulator (AER) took a bold step and ordered Nexen to immediately stop operating 95 pipelines after a July spill of five million litres of oil.

"It's like death by a million slices. No one wants to talk about it. There are endless amounts of spills out there," the former inspector said.

In 1947, the Leduc No. 1 well heralded the launch of Alberta's oil industry. According to the AER, about 444,000 oil or gas wells dot the province today. Roughly 214,000 are active, 60,000 are suspended, another 70,000 or so have been made compliant, and almost 37,000 are exempt from reclamation requirements. Then there are the 63,000 orphans.

Guardian is the industry-funded Orphan Well Association (OWA), which deals with cleanups at wells, pipelines and other facilities after bankrupt companies walk away.

This year, the OWA will spend $30 million, contributed by roughly 800 oil and gas licensees, to restore land at 695 sites where companies like Stealth Ventures or Tallgrass Energy have run out of financial gas. In 2014, $15 million was budgeted for the 162 sites in the OWA's inventory. Meanwhile, in the first quarter of 2014 alone, Canada's oil and gas industry pumped out a $2.2 billion profit.

In 2013, a mere 74 wells were added to the OWA's files. In 2012, when prices for Brent oil peaked at about US$125 per barrel, a trickle of 14 sites were abandoned.

Restoration/remediation costs can range from under $20,000 to over $1,000,000. The OWA uses an average of $180,000 per site for budgeting and can take three to 15 years to fully reclaim a site. Typically, a decade is needed to make the site look as it did, pre-drilling.

Still not on the OWA's radar are wells from the 1950s to 1970s. Back in those days, diesel was so cheap that it was easier to pour it in the well's sump pit, a.k.a the "garbage pit," than truck it out. Just a gallon of diesel can contaminate a vast area for years.

Around Drumheller, if you carefully burrow, you might find dinosaur bones. Around Provost, maybe arrowheads. In other parts of Alberta, digging into soil may yield metal drill collars, rusty cables, leaky barrels, dirty gloves and maybe even a whiskey bottle. At one site in Alberta's Peace River area, about 200,000 tons of contaminated dirt was hauled away over one year. The final cost was reportedly $6 million. Fortunately, things improved by the 1990s, when stricter environmental rules took hold.

But since that auspicious day in Leduc, Alberta's vast oil and gas reefs have left the province with a bittersweet history. In the first seven months of 2015, rig activity in Alberta has dropped by almost 50 percent. It should be orphan wells' catch-up time, but as Alberta faces a $6 billion deficit and growing unemployment, orphans of a different kind may become the priority.

"The light at the end of the tunnel is getting farther away," the former inspector said. "There's graveyards all over."

HARVEST CUTS MORE CANADIAN OIL JOBS

Harvest Operations is cutting more jobs as the Canadian division of Korea National Oil Company struggles with low oil prices.

The company confirmed Monday to BNN that roughly 40 mostly Calgary-based positions were being eliminated. The cuts represent more than 13 percent of Harvest's Canadian workforce and would follow another headcount reduction announced earlier this year.

In April, Harvest dismissed 105 employees and delayed the startup of its $900-million BlackGold oil sands project, saying at the time the facility required a minimum of US$60 per barrel for West Texas Intermediate (WTI) prices before production would be economic. About 70 of the 105 jobs cut were Calgary-based positions, while the rest were based at the BlackGold project site southeast of Fort McMurray.

Harvest has long been a drain on the balance sheet of its government-owned parent company. KNOC paid more than $4-billion in 2009 to purchase what was then known as Harvest Energy Trust, though the company has reported a net loss for every fiscal year since the acquisition closed.

In September 2014, Harvest agreed to sell its sole refining asset - the Come By Chance refinery on the island of Newfoundland - to New York City-based hedge fund SilverRange Financial Partners for an undisclosed amount. At the time, Harvest said "the company remains committed to maintaining and growing our operations in western Canada."

The latest round of layoffs for Harvest

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follows announcements of salary reductions and thousands of layoffs from several other Canadian oil and gas companies over just the past few weeks. Economists believe mass job losses may become increasingly common among Canadian resource companies until prices rebound.

PETRONAS MULLS CHANGES TO BRIDGE, JETTY SITE FOR B.C. LNG TERMINAL

acific NorthWest LNG is considering altering the trajectory of a planned suspension bridge and jetty in British Columbia in an effort to address the environmental concerns of the Lax Kw'alaams First Nation.

The Petronas-led consortium's proposal to export liquefied natural gas has been criticized by Lax Kw'alaams leaders, who are warning about the impact to fish habitat from building a B.C. LNG plant near Flora Bank – a sandy area that is visible at low tide.

AltaCorp Capital Inc. analyst Mark Westby, who co-wrote a new report on B.C. LNG, said on Monday that the challenge is how to redesign the suspension bridge and trestle-supported jetty to position them farther away from ecologically sensitive Flora Bank.

Flora Bank, which contains eelgrass that serves as habitat for juvenile salmon in the Skeena River estuary, is located next to the proposed $11.4-billion LNG terminal on Lelu Island in northwestern British Columbia.

The consortium, led by Malaysia's state-owned Petronas, has envisaged constructing the 1.6-kilometre-long suspension bridge to carry a pipeline beginning on Lelu Island and extending over the northwest flank of Flora Bank. That bridge would connect with a 1.1-kilometre jetty that is slated to stretch to a marine terminal for ocean-going LNG tankers.

"Engineering issues and shipping channels will dictate what is viable," AltaCorp said in its report, noting that the location of an "anchor block" is being scrutinized because that is the meeting point where the bridge would end and the jetty begin.

Flora Bank and Lelu Island are part of the traditional territory of the Lax Kw'alaams.

Spencer Sproule, Pacific NorthWest LNG's senior adviser of corporate affairs, said the consorti- um has been reviewing its engineering for the terminal and also the bridge and jetty that would lead to the berth for LNG carriers.

"Our current investigative works program is a continuation of two earlier phases of soil investigation from 2013 and 2014," Mr. Sproule said. "Significant consultation has taken place with local First Nations and stakeholders. Engineering for a project of this size is an iterative and methodical process."

The Canadian Environmental Assessment Agency is expected to rule by early 2016 on whether to approve Pacific NorthWest LNG's project, to be situated on federal Crown property administered by the Prince Rupert Port Authority.

AltaCorp noted that the federal New Democratic Party has indicated its support for more extensive environmental assessments, so if the NDP emerges as the winner of the Oct. 19 election, that could further delay the project.

In its 97-page report, AltaCorp said that, of 20 B.C. LNG proposals so far, it sees four as having the best chance of coming to fruition. One is a small-scale joint venture called Douglas Channel LNG, backed by AltaGas Ltd. The remaining three are major proposals – Pacific NorthWest LNG; Royal Dutch Shell PLC-led LNG Canada; and WCC LNG, co-owned by Exxon Mobil Corp. and Imperial Oil Ltd.

Peters & Co. Ltd. cautioned last week that there could be delays and cancellations with B.C. LNG projects, but still believes the industry is viable. "Our view remains that LNG export is likely to be developed on the Canadian West Coast," Peters & Co. said in its report.

Pacific NorthWest LNG has been targeted by several Lax Kw'alaams hereditary chiefs, who helped set up an occupation camp on Lelu Island three weeks ago. Gitxsan hereditary chiefs issued a statement Monday to offer their support to their Lax Kw'alaams counterparts.

Joey Wesley, a spokesman for the Gitwilgyoots, one of nine allied tribes of the Lax Kw'alaams, said LNG plans have not been properly evaluated.

The Lax Kw'alaams, one of five Tsimshian First Nations consulted last year during the provincial environmental review, opposed the energy export proposal during voting earlier this year. Two groups, the Metlakatla and the Kitselas, signed impact benefit agreements with Pacific NorthWest LNG in December. Two others, the Kitsumkalum and Gitxaala, have not yet announced their decisions.

"It's important to take our time and hear from all interested parties as we move through the design phase of our proposed facility," Mr. Sproule said.

FOR CANADIAN OIL SANDS IT'S ADAPT OR DIE

That low oil prices are squeezing out oil sands producers is not breaking news. But in spite of a grim oil price outlook, production out of Calgary has continued to grow, defying both expectations and logic. The implications are serious, not just for the future of Canada's energy industry and economy, but also North American energy relations.

In June 2015, the Canadian Association of Petroleum Producers (CAPP) revised down its 2030 production forecast to 5.3 million barrels per day (mbd). A year earlier the group predicted Canada would be able to produce 6.4 mbd by 2030. This is compared to the 3.7 mbd produced in 2014. Most experts agree that capital intensive oil sands projects are marginal – if not loss-making – in the $45 – $60 range. Yet production continues apace.

Of course, the nature of capital intensive operations such as the oil sands is that they are also prohibitively expensive to shut down. Producers are left in limbo, praying that prices will rise.

The implications for Canada should not be understated. Of the nation's estimated 339 billion barrels of potential oil resources, oil sands account for around 90 percent. The Canadian dollar is at a decade low, which softens the blow for exporters in the short term but the long-term economic consequences are less rosy.

Projects are being delayed, and many experts wonder if the current oil sands model has a future. Peter Tertzakian of ARC Financial told Alberta Oil Magazine that the era of oil sands mega projects was over.

In Alberta, an estimated one in 16 jobs is tied to the energy sector. According to the National Energy Board, crude oil and bitumen brought in $70 billion for Canada in 2014. Perhaps, as Tertzakian noted, new projects will simply adapt, becoming more nimble, flexible, and focused on value rather than quantity.

U.S. shale producers have found great success with this approach. Oil sands companies are already feeling the effects of a weaker macroeconomic environment and volatile global oil market. In August, Moody's Investor Service downgraded Canadian Oil Sands Ltd to Baa3, one step above a speculative rating. Canadian Oil Sands holds a 36.74 percent share in Syncrude, one of the most significant players in the oil sands space. The negative outlook reflects poorly on the industry as a whole.

Currently, Canada sends 99 percent of its oil exports - 2.9 million barrels per day - to the United States. Much of this is headed to refineries in the North East and on the U.S. Gulf Coast.

The U.S. has been suffering its own oil glut as increased productivity and efficiency gains in shale production have kept many operators afloat. However, even in the United States, oil production is finally starting to decline.

One way to ease an oversupply in the U.S. - and make room for even more Canadian crude - would be to reverse the outdated crude oil export ban. Lifting the ban to allow the

U.S. to export crude globally makes economic sense and advocates are garnering support from across the political spectrum. Still, the political maneuvering required means that any real movement is likely to be a medium-term prospect at best.

In the meantime, Canada's major limiting factor going forward is its lack of pipeline infrastructure. The United States will continue to consume Canadian crude but the market will eventually be saturated. Canada is looking to expand into markets in Europe and Asia but has no efficient means of getting there.

The controversial Keystone XL pipeline has grabbed the headlines but it is only part of the picture. Even if the pipeline were approved, Canada's oil sands production would rapidly exceed its capacity. Instead, Canada is looking to improve transport infrastructure at home.

The Energy East Pipeline aims to send 1.1 million barrels of oil from Alberta to refineries in eastern Canada but has faced opposition from several municipalities in Quebec, through which it would pass en route to Brunswick.

The Northern Gateway Pipeline would carry over 500,000 barrels per day to Kitimat in British Columbia but has likewise experienced backlash from affected communities and environmental groups.

With pipeline infrastructure moving slowly through regulatory processes, environmental impact studies, and community consultations, there are few alternatives in the interim. Canada continues to send crude by rail but the risks have been evidenced by a series of high-profile accidents in the last two years.

In the short-term, there may be no obvious relief for Canada's oil sands producers. Further credit rating cuts may force operators' hands. Oil sands production was always going to be a risky venture, even in a high oil price environment. Volatility will have a far more lingering effect on current and future production.

PACIFIC NORTHWEST LNG LOOKS FOR 'PACKAGE DEALS' TO SELL MORE LNG TO ASIA

Vancouver-based Pacific Northwest LNG will eye opportunities to sell additional volumes of LNG from its planned Canadian facility to Asian buyers as part of "package deals" following a demand from buyers, company President Michael Culbert said Tuesday.

"The Chinese, Japanese and Indian markets are seeking diversity [in supply sources] and Petronas is looking at a portfolio of supplying LNG for 20 to 30 years that will be sourced from Canada besides Australia and other global producers," he said on a webcast of the Peters and Co. annual conference in Toronto.

Petronas is 62% owner of the planned 12 million mt/year Pacific Northwest LNG project at Prince Rupert, British Columbia, that is aiming to start exports in late 2019/early 2020.

Petronas is also responsible for marketing LNG from that facility, Culbert said.

"A prime advantage of mixing LNG supplies from Canada with other producers will be stability of supply that buyers are demanding," he said.

Petronas has already sold nearly 50% of the planned output under long-term deals with Sinopec, Indian Oil Corp., Japex and Petroleum Brunei.

Culbert did not indicate the additional volumes that Petronas plans to sell under the package deals or if negotiations have already started with Asian buyers.

The Pacific Northwest LNG project entails an investment of $36 billion, Culbert said, that will include drilling in the upstream sector at Montney in the Western Canadian Sedimentary Basin, the construction of two gas liquefaction trains of 6 million mt/year each and marine facilities on Lelu Island, Prince Rupert.

"Cost structures have come down due to the advancement of technology and a downturn in the global oil industry," Culbert said, without indicating a figure.

Pacific Northwest LNG is awaiting final clearance from the Canadian Environmental Assessment Agency before taking a final investment decision to build its LNG facility, Culbert said.

The project has already received environmental approval from the BC Oil and Gas Commission.

WHEN GOOD LOANS GO BAD AMONG JUNIOR ENERGY COMPANIES

The energy sector is facing a season of pain as its loans are renegotiated.

This is shaping up to be a deeply unpleasant autumn for junior energy companies and the banks that lent them hundreds of millions of dollars.

Banks typically review their loans twice a year, but the last review took place in the spring when it looked as though oil prices might be poised to make a recovery. There are no such illusions now.

"Everyone got hall passes until the fall," said Bruce Edgelow, head of energy banking at ATB Financial. "But the notion is that the principal is going to be standing in the hall wanting his passes back."

The investment bank Canaccord Genuity suggested that Canada's banks are going to be looking to reduce their exposure to oil and gas loans by 15 to 20 per cent, simply because lending to energy has become too risky.

This has come as a shock to some juniors. The relationship between banker and corporate borrower tends to be pretty jolly when times are good, with money on tap for growth plans and parties during the Calgary Stampede. But when those loans become troubled, they are passed to another group, whose job it is to collect or otherwise get the debt off the books.

It's a little less friendly.

"When you move files to the special loans teams, in most of the eastern banks, they are managed by the eastern-based special loans guys and their sole mandate is to get off the position," said Edgelow. "Not necessarily to restructure and return it to health."

All of the major banks have increased the money set aside for bad loans to the energy sector. A year ago, the Royal Bank set aside just $5 million for potential bad loans in oil and gas. In the most recent summer quarter, that increased to $183 million.

ATB Financial, which is owned by Alberta's government increased its loan loss provision by nearly 500 per cent in the spring quarter to $57 million.

Loans to energy companies are largely secured by the value of oil and natural gas reserves in the ground. With oil prices down so sharply, many of those reserves are worth around half of what they were a year ago. That is the driving force behind re-evaluating the loans.

Edgelow said ATB in the spring told its clients who were stretched that it was time to raise some cash. Many companies tried to sell oil and gas assets, but there was a widespread difference between the asking price and the offer.

"Some of the bids won't clear the bank debt," said Edgelow. "So the borrowers are having a hard time figuring out what to do."

Canaccord Genuity said in its report this week that it expects corporate lines of credit to be cut by 15 to 20 per cent in the fall and that the loan re-evaluation will probably lead to a wave of merger and acquisition activity in which companies that have managed their debt and have cash on hand will be able to pick off companies that are struggling.

There is another option. For months now, hedge funds that buy debt have been circling all the banks, looking to buy distressed loans, although not at full price. Selling those loans might be a quick way to get them off the books, but can also hurt long-term relationships in the sector.

Finally, there's insolvency. Edgelow says only around a dozen juniors have been pushed into receivership since the downturn began last fall, three of which are clients of ATB. Once in receivership, the assets are sold off, the banks are paid back and investors are typically left with little or nothing.

Edgelow said there's a reluctance to take that step, but that sometimes it's necessary.

"We will be less likely to push the receivership, if we don't have to," said Edgelow. "And we will be more patient, as long as we don't think our collateral will be eroded."