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Thailand looking to invest in LNG projects overseas

(Bloomberg; March 19) - The Asian energy companies sitting on the largest horde of cash outside China are ready to put it to use. Thailand's PTT Exploration & Production and its parent company have nearly \$11 billion combined in cash and marketable securities, such as bonds and other short-term investments. The explorer arm of the parent is ready to spend from its portion on projects and exploration acreage to rescue the country's declining oil and gas reserves, said CEO Somporn Vongvuthipornchai.

PTT E&P is eyeing early-life producing assets or projects that are sanctioned and ready for development, Somporn said in an interview. It is also looking to work with its parent, PTT, to invest in liquefied natural gas plants, which would help feed Thailand's growing demand. "We're looking at opportunities in the few hundred million to \$1 billion range."

"Domestic oil and gas production is going to decline over the coming years, so that puts more emphasis on ... PTT E&P to go overseas and build supply," said Neil Beveridge, an analyst with Sanford C. Bernstein in Hong Kong. Parent PTT is looking to expand LNG imports to meet growing domestic demand fueled by economic expansion, while Thailand's production is declining. Somporn he would prefer a project where the export facilities and production fields are combined, as opposed to projects such as those on the U.S. Gulf Coast where firms buy gas and then pay to have it liquefied for export.

U.S. LNG may not work out as Japanese buyers had expected

(Nikkei Asian Review; March 17) - U.S. efforts to boost liquefied natural gas and oil exports provide a good opportunity for Japan to break free from its dependence on the Mideast. As part of that plan, construction is underway in Freeport, Texas, on a gas liquefaction plant. Freeport LNG is expected to start exports in 2018 and will be capable of producing 13.2 million tonnes a year — 5 percent of last year's global LNG trade. Most of the plant's capacity is under contract to Japanese and South Korean buyers.

U.S. LNG may well be good news for Japan. The country's LNG contracts with Australia — its largest provider — have destination clauses that restrict buyers from reselling the gas, making it impossible to unload surplus LNG to other customers. U.S. contracts do not. In January, Japan imported its first cargo from the year-old LNG terminal at Sabine Pass, La. If Japan can import more U.S. gas, it would less constrained by destination clauses. However, it would be unwise for Tokyo to see U.S. LNG as a panacea.

In 2013, Toshiba struck a deal with Freeport LNG to liquefy 2.2 million tonnes a year for 20 years, starting in 2019. The troubled electronics maker had planned to bundle sales of power-generation equipment and LNG, but U.S. LNG prices have cast doubt on that plan. Most of the world's LNG is traded on long-term contracts linked to oil prices, and low oil prices have made U.S. LNG more costly by comparison. LNG exports from the Gulf Coast are based on U.S. gas prices, plus liquefaction costs plus shipping. Amid a global supply glut, it is unknown whether Toshiba can sell its U.S. LNG at a profit.

Oversupplied market hurts LNG project economics, columnist says

(Forbes columnist; March 16) - U.S. gas is adding to the oversupplied global market, with large volumes of liquefied natural gas exports coming online in the next few years. LNG production from a number of countries, including the U.S., is growing, with projections that the large supply boost from 2015 to 2020 will exacerbate and prolong the glut. It seems highly likely that high-cost producers will experience significant pain.

Combined with start-ups in Australia and new discoveries in the Mediterranean and offshore East Africa, there seems no prospect that the glut will diminish for years to come. In theory, lower prices would mean greater market penetration, but not enough to offset rising supply. The big target is coal use in Asia, especially China and India, now struggling with severe pollution. Unfortunately, the price of coal in China is about \$3 per million Btu, about what it costs just to liquefy gas and well below LNG market prices.

While many hope that oil and gas prices will recover, the reality is that prices in recent years were elevated by the 2011 Fukushima nuclear accident and closure of Japan's nuclear power plants, plus abnormally high oil prices due to political supply disruptions around the world. The industry unfortunately has misinterpreted temporarily high prices as the new norm. Probably, the newest (and highest cost) Australian projects will lose some serious money, and other projects will be cancelled or delayed, while the export terminals under construction in the U.S. should face very difficult sales prospects.

Opponents ready to fight again against LNG project on Oregon coast

(Oregon Public Broadcasting; March 17) - The Jordan Cove LNG project in Coos Bay, OR., is still alive, despite being denied by federal regulators last year. Calgary-based Veresen has resubmitted its plans and is holding a new round of required public meetings. The company proposes to build a 232-mile pipeline to bring gas to the South Oregon Coast for liquefaction and delivery to buyers in Asia. "It's kind of this zombie project that keeps coming around that just won't die," said Robyn Janssen of Rogue RiverKeeper, an Oregon environmental group that has been leading the opposition.

This isn't the first regulatory rodeo for the LNG project — it's actually the third iteration of the project. Managers are restarting the federal regulatory process, believing they will have better luck with the Federal Energy Regulatory Commission under the Trump administration. This is also the third time that environmental and landowner groups have geared up for a fight. "We're just getting ready and circling the wagons and ready to show them that opposition is still just as strong as it was, if not stronger," Janssen said.

The national mobilization against the Dakota Access Pipeline has brought many more people into active opposition against the Jordan Cove LNG project, Janssen said. Environmental groups say Oregon should instead be looking to develop its renewable energy economy. Landowners in the path of the proposed pipeline have objected to the possible use of eminent domain to take their land. Others have cited safety concerns.

Oregon LNG opponent talks with Texans about their projects

(Port Isabel South Padre Press; Texas; March 17) - Representatives from groups in Oregon and Maryland opposed to liquefied natural gas projects in their states were in Brownsville, Texas, on March 14 to share their stories about how LNG facilities have or could affect their communities. The two men spoke to a gathering of Rio Grande Valley LNG opponents — members of the grassroots movement known as Save RGV from LNG — who are fighting three proposed gas terminals in their coastal region.

Dressed in a blue shirt and a straw Stetson cowboy hat, Ted Gleichman looked more like a Texas cowboy than a resident of the Pacific Northwest. His patient determination and grit would fit right in here, too. Gleichman, with the Center for Sustainable Economy and the Oregon Sierra Club, spoke of how residents in his state are fighting against two proposed LNG export terminals — one in Coos Bay, about 100 miles north of the California border, and one in Warrenton, at the mouth of the Columbia River.

Neither of the Oregon projects have received the go-ahead from state and federal agencies. "They were defeated by a combination of bad planning, good science, lots of citizen activism, elected officials getting involved and people who really cared about being careful with our environment," Gleichman said of the Coos Bay project, Jordan Cove LNG. The controversial LNG export terminal on Maryland's Chesapeake Bay is under construction and scheduled to open late this year.

Analysis explains why Australian gas consumers bear the risk

(Australian Broadcasting Corp. analysis; March 17) - It's Australia's great gas robbery. When you look in horror at your gas bill, think this: You are the unwitting victim of a gigantic game of risk shifting by multinational oil and gas producers that have played the domestic customer because they saw something we didn't see two years ago. It has

resulted in gas once destined for our heaters, cookers and manufacturing plants being sent north to Gladstone where it is liquefied and sent to Japan, South Korea and China.

Those ginormous LNG projects in Queensland were pursued by their proponents on the industry-wide assumption that the price of oil would never dip below \$US65 a barrel. In fact, that price was the worst-case scenario when some of the projects were sanctioned. Oil is now well south of that price and has been for some time. The expectation is that the price will remain low for some time yet. The state and federal governments, which also assumed a certain oil-price trajectory, approved the projects on the expectation that high prices would prompt the proponents to develop their large gas reserves.

But investing in coal-seam gas isn't as attractive as it once was. The costs have made new wells more expensive than the gas we have been using in our stoves and factories. The companies saw this coming two years ago and set about buying up the cheapest gas possible to fulfil their LNG contractual obligations. It's meant that the plants are now sucking gas from as far as Victoria and South Australia. LNG producers have decided against putting any more capital into coal-seam gas projects, leaving many of their own reserves undeveloped. By deferring development of their own reserves, the companies are effectively shifting the risk of these investment decisions to Australian customers.

Several differences explain spread in U.S.-Australia natural gas prices

(Australian Financial Review; March 19) - Australia and the U.S. are two of the world's richest endowed natural gas economies, but the difference in how they are managing their energy windfalls could not be more stark. The U.S. is drilling record amounts of gas and oil, and as a result the domestic price of gas has plunged to below \$US3 per million Btu. Australia is also producing copious amounts of gas, increasingly for export to Asian customers, but domestic industrial users face spot prices of up to about \$18.

There are a host of variables that contribute to the differences in the energy markets and higher prices in Australia, but four stand out that perhaps offer Australia potential lessons: pipeline infrastructure, financial incentives for private landowners to allow drilling, regulation, and exports. First, the U.S. has an elaborate network of pipelines around most of the country to transport gas from energy rich states to its 320 million residents and millions of energy-intensive businesses such as chemical manufacturers.

Second, U.S. private landowners own the minerals underneath their land and are paid lucrative access fees and royalties by companies to extract the gas. Not so in Australia. Third, U.S. regulatory rules are generally more favorable to the energy industry. Fourth, only last year the U.S. began exporting gas beyond neighboring Canada and Mexico, leaving plenty left over for domestic users. The ramp-up of U.S. liquefied natural gas exports is just starting. In Australia, companies have spent more than \$200 billion building huge LNG export terminals to ship energy to Asia, depriving the local market.

Australia adjusts to economic loss as LNG construction ends

(Brisbane Times; March 18) - Not that long ago, so many people were falling over themselves to get to Gladstone in northeast Australia that the council was paying others to leave. Police were being called to direct traffic at open-home inspections, while out-of-towners slept in their cars. A "modern-day gold rush" was unfolding in the coastal city of 60,000. If you thought the city at the center of it all has done well from the wild ride sparked by the simultaneous start of construction of three liquefied natural gas plants on nearby Curtis Island in 2010, you should think again as construction has wrapped up.

When shop owner Jenelle Knight starts talking about the struggles her community is facing to keep Gladstone alive, she breaks down in tears. "The people here are resilient, [but] I think they have really been pushed this time. We have lost a lot of people, a lot of businesses, and I think there is a lot more just holding on and that is really sad." The fabrics of society were torn when 14,500 new jobs appeared almost at once, as the unprepared city rushed to build housing estates, apartment complexes and motels.

Rents skyrocketed, with seniors no longer able to afford to live in the community they'd known all their lives. Teachers, nurses and police were either forced to move away by the high costs, or threw in their day job to join the crews constructing the plants. When construction was done, the rapid increase in rent, wages and people retracted just as quickly and hit the city hard — seven years on, about 1,200 homes sit empty throughout the region, more than a dozen empty shops line the city's main strip, and the Gladstone Regional Council is working hard to coax people back into the community.

Myanmar wants to build its first LNG import terminal

(Nikkei Asian Review; March 14) - An international tender to build Myanmar's first liquefied natural gas import terminal will go out as early as April, presenting a business opportunity for Asian trading and energy companies, according to a government source. Along with a floating LNG import terminal with an annual capacity of 3 million to 4 million tons, the proposed \$2 billion project includes construction of 120 miles of pipeline to bring the gas to urban areas and a 1-gigawatt gas-fired power plant.

The government will select the winning bid by the end of the year, with the terminal to go online in 2020, at the earliest. The project is designed to meet growing electricity demand in the country. However, as Myanmar looks to import LNG, it also continues to export gas to China through a 1,500-mile pipeline owned by China National Petroleum Corp. Exports started in 2013.

Electricity consumption in Myanmar is forecast to triple by 2020 from 2012 driven by economic growth that took off after the transition to a civilian government in 2011. At

present, 60 to 70 percent of the country's power plants are hydroelectric, which means their output varies with the season. The government is scrambling to build more power plants to ensure a stable supply of electricity.

South Korean shipbuilders hopeful of more LNG orders

(Nikkei Asian Review; March 15) - After a long slump, South Korean shipbuilders are showing signs of recovery on the back of increasing demand for liquefied natural gas carriers, analysts and company officials said March 15. Korea's top three shipbuilders — Hyundai Heavy Industries, Samsung Heavy Industries and Daewoo Shipbuilding & Marine Engineering — are looking to benefit from the upswing in LNG shipping.

"As oil prices are hovering over \$50 per barrel, LNG projects are starting to be resumed," said Lee Kang-rok, an analyst at Kyobo Securities. Lee estimates that more than 30 LNG ships will be ordered this year with a combined value of at least 6 trillion won (\$5.2 billion). That is welcome news for shipbuilders whose earnings were hammered last year as demand for their services fell away.

Hyundai Heavy said it already has secured two orders for LNG carriers this year, including a floating receiving, storage and regasification ship. Samsung Heavy also has won an order for a floating LNG storage and regas (FSRU) vessel. "We expect demand for FSRU to increase," Samsung Heavy said in a statement. "We forecast we will win four to five new FSRU ship orders every year by 2020 from mainly emerging countries."

Crowley starts work on LNG fueling depot in Jacksonville, Fl.

(Jacksonville Business Journal; FL; March 14) - Crowley Maritime and Eagle LNG recently began construction of a liquefied natural gas storage and loading facility at Jaxport's Talleyrand Marine Terminal. The LNG bunker fueling facility will serve Crowley's new LNG-powered, combination container/roll-on roll-off ships that are under construction for use in the U.S.-to-Puerto Rico trade.

Within the month, Chart Industries is expected to deliver two of its 265,000-gallon LNG storage tanks at the facility. The tanks, weighing 260 tons each, were built in Europe. Crowley is investing more than \$550 million in the two new ships, along with a new 900-foot pier at the Jacksonville port. Crowley also has invested in improvements at its Isla Grande terminal in San Juan, Puerto Rico.

The combination container/roll-on roll-off ships, designed to travel at speeds up to 22 knots, will begin service in the second half of 2017 and first half of 2018. The 720-footlong ships are being constructed at a Mississippi shipyard.

Eni wants permission for drilling into federal waters off Alaska

(Bloomberg; March 16) - The Interior Department is weighing Eni's request to explore for oil in federal waters offshore Alaska, giving the Trump administration a chance to reverse course from President Barack Obama's attempt to curtail Arctic drilling. Eni's exploration well would be in an area it previously leased from the federal government, and so it isn't covered by the executive order Obama issued in December to block the sale of new drilling rights within huge swaths of the Chukchi and Beaufort seas.

As the Trump administration considers ways it could reverse Obama's directive, approving Eni's proposal could encourage more oil companies to consider Arctic exploration. Although some oil companies have abandoned plans to launch expensive quests for crude off Alaska's coast, recent discoveries have fanned interest in waters near the shoreline that can be drilled at a lower cost.

The Bureau of Ocean Energy Management is conducting an initial 15-day review of the plan filed by Italy's Eni, which wants to sink a well in the federal waters of the Beaufort Sea before its leases expire at the end of the year. If the bureau deems Eni's blueprint complete, it would advance to public comment and a 30-day review. Before it could drill at its Nikaitchuq North well, Eni also would have to obtain a permit from the Bureau of Safety and Environmental Enforcement and secure other government approvals.

Eni already uses a man-made gravel island to extract oil from leases in state waters and wants to use that same site for extended-reach drilling to target nearby federal waters.