LNG Unlimited

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Australian LNG and gas assets attract more takeover interest

Chinese group bids US$9.8Bln to control many of Australia's feed-gas pipelines

LNG Journal editor

Australian pipeline company APA Group that controls connections to LNG plants in the states of Queensland and Western Australia and is building a pipeline to a new FLNG import project near Melbourne is the latest to attract overseas takeover interest.

Following Harbour Energy's unsuccessful bid for Asia-Pacific LNG stake owner Santos, APA has received a A$13 billion (US$9.8 billion) takeover offer from a Chinese consortium, comprising CKI Infrastructure and Power Assets Holdings.

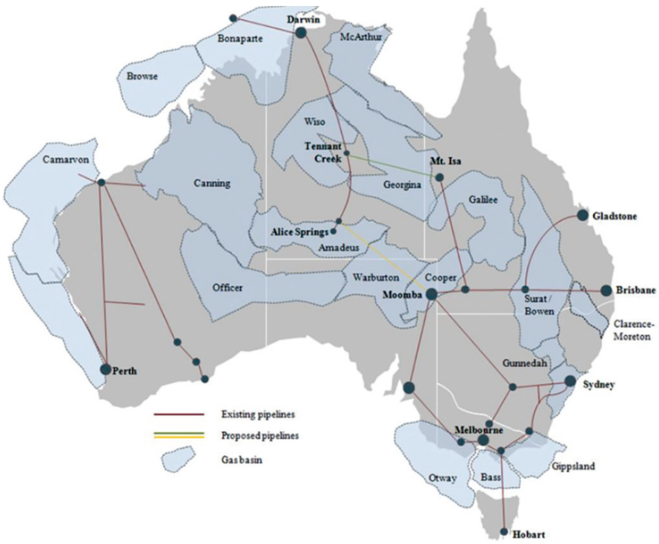
The offer came a day after APA signed an agreement with AGL Energy to build the pipeline infrastructure for AGL's proposed floating LNG import terminal in the state of Victoria.

CKI is the global group created by Chinese billionaire Li Ka-shing and is targeting Sydney-based APA, which delivers about half of the natural gas consumed in Australia.

The APA offer was made by Victor Li, who succeeded his father in May 2018 as head of the CK group of companies in Hong Kong.

Among the pipelines APA owns is the link to the Royal Dutch Shell-operated Queensland Curtis LNG export plant from the coal-seam gas fields in central Queensland to the liquefaction plant on Curtis Island near Gladstone.

CKI, originally known as Cheung Kong Infrastructure Holdings, and its partner made an all-cash offer of A$11 a share for APA. The offer is 33 percent more than APA's last closing price of A$8.27.



APA is a key owner in Australia's gas pipeline network

CKI previously had a bid for Australia's network company Ausgrid refused by the government in Canberra, though in 2017 it successfully acquired the Western Australian Duet Group for A$7.3Bln, which comprises Australian powerlines, gas pipelines and power stations.

The successful Duet Group bid by CK Infrastructure gained control of Western Australia's most important pieces of energy infrastructure, including the Bunbury to Perth gas pipeline and pipelines from the offshore Carnarvon Basin.

However, as part of the bid CK Infrastructure has proposed selling some of the bigger Western Australian pipelines held by APA to allay potential concerns by the Australian Competition and Consumer Commission (ACCC).

APA has agreed to let CKI undertake due diligence. CKI said it had already held preliminary discussions on the proposed offer with the ACCC and the Australian Foreign Investment Review Board.

APA confirmed the unsolicited offer in a statement to the Australian Securities Exchange.

"The APA Board makes no recommendation in response to the proposal at this time," it said.

"Securityholders are advised to take no action at this stage. There is no certainty that the proposal will result in a transaction," added APA.

APA said the Chinese offer was not conditional on any proposed divestments occurring before completion of any transaction.

"The APA Board will continue to evaluate the proposal and will update APA's Securityholders and the market as appropriate," said APA Group Chairman Michael Fraser.

"The Board believes APA has a very attractive business and is well positioned to continue delivering strong results and ongoing growth irrespective of whether the proposal proceeds to an offer," added Fraser.

■

US seeks comments by July 27 on the most detailed LNG export economics study ever

LNG Journal editor

The US Department of Energy (DoE) is seeking public comment by July 27 on a new study on various economic outcomes for its growing liquefied natural gas exports based on supply, demand and price forecasts for the years 2020 to 2040.

The study is entitled "Macroeconomic Outcomes of Market Determined Levels of US LNG Exports" and was commissioned to help the DoE's Office of Fossil Energy to make decisions on future applications to export shipments from new plants.

Cove Point is on stream at Chesapeake Bay in Maryland

Volume range

The more likely range of LNG exports in 2040 was judged to range from 8.7 to 30.7 billion cubic feet per day (Bcf/d), which translates into 3.2 to 11.2 trillion cubic feet (Tcf) per annum.

The New York-based consultancy firm, National Economic Research Associates (NERA), compiled the report that examined the probability and macroeconomic impact of LNG exports with alternative scenarios based on the Energy Information Administration's 2017 Annual Energy Outlook.

"Combining three US supply cases, three US demand cases, three international demand cases, and two international supply cases in all possible combinations yielded a total of 54 different scenarios for LNG exports," said the DoE.

"The probabilities of each of these 54 scenarios were calculated from the probabilities assigned to the four cases making up each scenario," it added.

The DoE said a Global Natural Gas Model (GNGM) developed by NERA was used to project natural gas supply, demand, and prices for the years 2020 to 2040 for each scenario for the US and the rest of world.

Possible future export levels in the scenarios evaluated include very unlikely extremes, from zero in cases in which the US "shale revolution" ends abruptly and global demand is limited to levels that exceed the total export capacity for which LNG export authorization applications have currently been filed.

The US demand case even includes "an aggressive national Renewables Mandate that is in line with California's stringent target" for solar, wind and other non-hydrocarbon power sources.

"Throughout the entire range of scenarios, we find that overall US economic output is higher whenever global markets call for higher levels of LNG exports, assuming that exports are allowed to be determined by market demand," explained the DoE.

The study additionally identified four major sources of uncertainty that affect LNG exports from the US: natural gas supply conditions, domestic demand, supply availability in the rest of the world and global demand.

Cheniere progresses on Corpus Christi LNG Project in Texas as first gas goes to Train one

Cheniere Energy is making progress on the first two liquefaction Trains at the $13 billion Corpus Christi export project being constructed in Texas as the first gas is being introduced to Train one.

However, the commercial start-up of the Texan plant located on the La Quinta Channel on the northeast side of Corpus Christi Bay is still at least six months off.

Cheniere filed a request with the US Federal Energy Regulatory Commission on June 7 to introduce fuel gas to start commissioning Train 1.

"On December 30, 2014, the Federal Energy Regulatory issued an Order Issuing Authority Under Section 3 and Section 7(c) of the Natural Gas Act granting the necessary authorization to Corpus Christi Liquefaction (CCL), for the construction and operation of the Corpus Christi Liquefaction Project," it said.

"CCL is herein requesting authorization to introduce fuel gas to commission Train 1. CCL is requesting authorization at the earliest time possible, but no later than June 29, 2018, in order to remain on schedule," said Cheniere.

The first two Corpus Christi Trains are about 87 percent complete. Trains one and two are currently set to enter service at the 1,500-acre site ahead of schedule in the first and second halves of 2019 respectively, according to Cheniere.

The original guaranteed schedule had trains one and two in service by the end of October 2019 and July 2020, respectively.

Train three also received its final investment decision in May 2018 and a further expansion after that remained a prospect. The project is being developed for at least three Trains with 13.5 MTPA of total capacity, three LNG storage tanks and two marine berths for the largest carriers.

Around 8.4 MTPA of Corpus Christi production has been contracted to third parties on a long-term, free-on-board basis whereby they provide their own shipping.

Customers include Australia's Woodside Petroleum and Frances's EDF, Spanish energy companies Endesa, Iberdrola and Gas Natural Fenosa as well as Pertamina of Indonesia.

The first two Trains are fully contracted and Train 3 is partially contracted. Any excess capacity not sold under long-term sales agreements will be available for Cheniere Marketing to sell.

Cheniere posted net income of $357 million in the first quarter of 2018 compared with $54M in the same three months last year as four processing Trains are now producing 18 million tonnes per annum of gas for export at its Sabine Pass plant in Louisiana.

During the first quarter, Cheniere engaged a group of international banks to assist in the structuring and arranging of more than $6 billion of credit facilities for the Corpus Christi venture.

Cheniere also has expansion plans that are in the process of being amended from two additional Trains with expected output of 9 MTPA to up to seven mid-scale Trains with production of 9.5 MTPA.

The Stage 3 Project as it is called would increase Cheniere's expected overall output at the Texas plant to about 23 MTPA.

Aguirre project company in Puerto Rico makes filing

The Aguirre LNG import project company in Puerto Rico, said it was continuing to monitor the bankruptcy proceedings of the Puerto Rico Electric Power Authority and is hopeful of the US territory completing a second import facility in the future.

"Aguirre LLC continues to monitor PREPA's Title III process and the path forward, and continues to see a future need for the project," it said in its latest filing to the US Federal Energy Regulatory Commission.

"Outstanding permits are progressing through their relevant agencies, but disruption caused by Hurricane Maria and the current financial situation of PREPA and Puerto Rico have impacted the schedule," the Aguirre company acknowledged.

The Aguirre project company filed a status report on June 13 2018 to the FERC to keep its permit process up to date.

The FERC in July 2015 had issued an authorization for the Aguirre Offshore GasPort to be sited along the southern coast of Puerto Rico near the town of Salinas.

Excelerate Energy had previously agreed to provide a floating storage and regasification unit (FSRU) for the Aguirre project in 2019, though was forced to cancel its contract with the bankrupt public utility PREPA.

The FSRU was to have been deployed offshore the towns of Salinas and Guayama and would also have a 4-mile (6.4 kilometres) pipeline to provide regasified LNG supplies to the existing Aguirre power station in Salinas.

Puerto Rico's existing Eco-Electrica onshore LNG regasification facility is located about 35 miles east of the Aguirre power plant and planned FLNG facility.

Clean Energy Fuels shareholders welcome Total to US LNG trucking

LNG Journal editor

US company has around 550 natural gas fuel stations

Shareholders in Clean Energy Fuels Corp., the California-based supplier of liquefied natural gas and compressed natural gas fuel for the trucking industry, have approved the sale of a 25 percent stake to French energy major and global LNG market participant Total.

Total had earlier agreed to purchase 50.8 million shares of Clean Energy's common stock for $83.4 million to become Clean Energy's largest stockholder.

Provider

Clean Energy, based in Newport Beach and listed on the Nasdaq stock exchange, is a leading provider of natural gas fuel for transportation in North America and has a network of filling stations completed in 2017 from southern California to the Canadian border as well as elsewhere in the US.

The US company has around 550 fuel stations across the country and in Canada as it continues with its growth strategy for LNG, CNG and biogas fuel distribution.

Clean Energy said the sale to Total was approved by more than 97 percent of shareholders and was expected to close on or about June 13.

The US company stated that this new partnership will combine one of the world's leading energy companies that operates over 16,000 fueling stations with North America's leading provider of clean natural gas as a transportation fuel.

The investment will also allow Total to nominate two members to Clean Energy's board of directors.

"This significant investment by Total is a confirmation of Clean Energy's business plan to expand the use of clean natural gas as a transportation fuel, especially by those vehicles which consume the most fuel and cause the most pollution," said Andrew J. Littlefair, Chief Executive and President of Clean Energy.

"The number one priority of the new partnership between the companies will be to make it easier for more heavy-duty truck fleets to transition away from diesel and adopt a cleaner, zero emissions natural gas fueling solution," added Littlefair.

Clean Energy, with support from Total, also plans to launch a truck-leasing programme that is intended to place thousands of new natural gas-fueled, heavy-duty trucks on US roads to use Clean Energy fuel stations.

Chart Industries names Evanko as CEO to replace incumbent Johnson

Chart Industries, the US liquefied natural gas equipment-maker and industrial gases company, has named Jillian C. Evanko as Chief Executive and President to replace incumbent William C. Johnson and has elected her to the board.

Evanko has served as Vice President, Chief Financial Officer, Chief Accounting Officer and Treasurer of Chart since March 2017.

"She succeeds William C. Johnson who has been terminated without cause, in accordance with his employment contract," said Chart in a statement without adding further details on the CEO's departure.

Steven W. Krablin has been elected Chairman of the board. Krablin has served as a member of the board since July 2006 and has been the lead independent director since June 2015.

"We are pleased to unanimously appoint Jill as CEO and are confident that she has the experience and skills to lead Chart into the next phase of its evolution," said new Chairman Krablin.

"Jill has been instrumental in our balanced growth while simultaneously unlocking significant cost savings through operating synergies," said the Chairman.

"We thank Bill for his contributions, and wish him the best in his future endeavors," added Krablin.

Evanko thanked the board for appointing her and for the opportunity to guide Chart towards sustainable growth across each of the business units.

"Our backlog and order trends, along with our executed cost reduction activities, have positioned us to deliver on our 2018 operating objectives," said Evanko.

"At our recent investor day, we laid out a long-term strategic vision for Chart and provided expectations for what the business can achieve by 2021," the new CEO added.

NEWS NUDGES

Tianjin LNG cargo bid

US Commodity pricing agency Platts has received its first transparent and open bid for an LNG cargo as part of its pricing process. Commodity trader Trafigura placed a bid for a physical cargo of LNG to be delivered into the Tianjin import terminal in northeast China during the period August 22 to August 25 at $10.50 per million British thermal units. Platts said the price was later raised to $10.55 per MMBtu. The Swiss trader also gave the option for the cargo to be unloaded in Japan, South Korea or Taiwan.

LNG ferries for BC

The American Bureau of Shipping said that the "Spirit of British Columbia", one of two ferries classed by ABS that will use LNG as fuel, has completed its conversion and is back in operation for BC Ferries of Canada. "The conversion of these vessels to operate on LNG is an important milestone for BC Ferries and the region, supporting more efficient and environmentally-friendly transportation," said ABS Vice President for Global Gas Solutions, Patrick Janssens. "With the increased pressure for environmental compliance, LNG as fuel is a practical option for many marine owners and operators," added Janssens.

Mozambique block survey

The French firm Compagnie Generale de Geophysique (CGG) has completed a 15,400 square kilometres 3D marine seismic survey in the deepwater Zambezi Delta Basin offshore central Mozambique to help in future energy block auctions.

AGL Energy signs two accords to advance Australian LNG terminal project near Melbourne

LNG Journal editor

Crib Point facility has organized pipeline near this jetty

AGL Energy of Australia said it signed two agreements in relation to its proposed liquefied natural gas import jetty planned for Crib Point in the state of Victoria, one of two regasification projects planned for the southeast of the country to underpin gas supplies.

AGL said it signed a development and Gas Transportation Agreements with APA Group, the pipeline and infrastructure company, for the development and construction of the Crib Point Pakenham Pipeline and the ongoing transportation of gas from the proposed LNG import jetty to the domestic market.

Early work

"APA will continue early work including sourcing certain long lead-time items for the development of the proposed pipeline," said AGL.

Sydney-based APA is currently being pursued in a takeover bid by a Chinese company, though analysts believe it will not impact the LNG venture.

"Construction and operation of the pipeline is subject to regulatory approvals, the granting of the pipeline licence and final investment decision by the AGL board," added the company.

While the AGL project plans to supply the Melbourne region with gas, the second LNG project is aimed at New South Wales and the Sydney area.

It is being developed by Australian Industrial Energy, part of the Minderoo Group, and Japanese companies Marubeni Corp. and Jera Co. Inc.

The Australian-Japanese joint venture has chosen Port Kembla to bring in shipments of LNG by 2020.

Port Kembla is an existing industrial cargo port with man-made breakwaters about 100 kilometres south of Sydney in the Illawarra region.

For its project, AGL has also signed a berthing lease and jetty agreement with the Port of Hastings Development Authority for the long-term use of Crib Point Jetty Berth 2.

"The Port of Hastings Development Authority will begin jetty remediation works to prepare for AGL's exclusive occupation of Crib Point Jetty Berth 2 for the continuous mooring of a floating storage and regasification unit (FSRU)," AGL explained.

"The agreement is subject to regulatory approvals and final investment decision by the AGL board," it added.

AGL said it was aiming for a final investment decision on the Crib Point LNG Import Jetty, to be located about 90km south of Melbourne, during the 2019 financial year and or delivery of first gas into the domestic market during 2021.

"The Crib Point LNG Import Jetty project has significant potential to provide AGL with the ability to deliver a new flexible source of gas supply to the southern states of Australia," said Andy Vesey, AGL Managing Director and Chief Executive.

"This will deliver liquidity, increasing competition to put downward pressure on wholesale prices and provide much needed capacity and long-term security of supply," he added.

The AGL CEO said that according to the Australian Energy Market Operator's Victorian Gas Planning Report released in March 2018, without additional gas supply there is a potential shortfall in the market from 2022 and a potential shortfall in meeting peak Victorian winter daily demand in 2021.

"Our proposed project is uniquely placed to address this challenge," stated Vesey.

The Australian-Japanese venture planned for Port Kembla will initially handle around 2 million tonnes per annum of LNG by 2020.

The project backer, the Minderoo Group, is controlled by Australian billionaire Andrew Forrest.

Marubeni, a long-standing global LNG market participant, is taking part along with Jera, itself a joint venture between two of Japan's largest utilities, Tokyo Electric Power Co. and Chubu Electric Power.

The project will also include a long-term charter of an FSRU, construction of associated onshore and offshore facilities and the provision of gas to local customers in the state of NSW.

Italian-Taiwan joint venture to build LNG terminal in Thailand for receipt of Mozambique cargoes

LNG Journal editor

Italian energy engineering company Saipem was awarded a joint venture contract with CTCI Corp. of Taiwan to construct Thailand's new Nong Fab LNG import terminal, the nation's second regasification facility.

Saipem said the work had an overall value of $925 million and the company would operate as leaders of the construction venture.

The one existing Thai LNG terminal is at Map Ta Phut

Location

The contract has been awarded by the LNG subsidiary of Thai energy company PTT and the facility would be located in the Mueang Rayong district.

Saipem's scope includes the engineering, procurement, construction and commissioning of the Nong Fab terminal with a maximum receiving capacity of 9 million tonnes per annum.

"As well as consolidating Saipem's presence in an area amid great prospects for development in South-East Asia, the signing of this contract strengthens our position in the LNG sector which is of interest to us in terms of both the liquefaction and regasification segments," said Stefano Cao, Saipem Chief Executive.

"Furthermore, this contract represents a step forward towards achieving greater balance in our portfolio, between downstream and gas projects and those linked to upstream," added the CEO.

Thailand began LNG imports at its first regasification terminal at Map Ta Phut, near Bangkok, in 2011.

The country imported 3.95 million tonnes of LNG in 2017 and is seeking to improve its import and pipeline infrastructure to meet increasing domestic natural gas demand.

Its main supplier is currently Qatar, though shipments are received from other nations such as Australia and Malaysia.

Thai energy firm PTT holds an 8.5 percent stake in the Area 1 licence offshore Mozambique operated by Anadarko Petroleum and more cargoes will be shipped to Thailand from the southeast African nation after 2022.

PTT has signed a 20-year Sale and Purchase Agreement for 2.6 MTPA of LNG once the Mozambican plant comes on stream.

Japan spot price was higher than year ago but lower than April

The average price paid by Japanese buyers of spot LNG cargoes contracted in May was $8.20 per million British thermal units compared with $5.70 per MMBtu in the same month of 2017, though was lower than the previous month.

The average price for cargoes delivered to Japan in May stood at $7.90 per MMBtu versus $5.70 per MMBtu in May 2017.

Japanese spot cargoes contracted in April to arrive in Japan at a later date had cost an average of $9.10 per MMBtu compared with $5.70 per MMBtu in April 2017.

Spot LNG cargoes that arrived in April cost an average of $8.80 per MMBtu compared with $5.90 per MMBtu in the same month the previous year.

The spot cargo numbers come from the commerce division of the Japanese Ministry of Economy, Trade and Industry and are only issued if a minimum number of two trades are recorded.

The Ministry emphasizes that "spot LNG" refers to fuel traded on a cargo-to-cargo basis and does not mean shipments under contracts on a short-term, medium-term or long-term basis. The statistical accounting of the spot prices started in March 2014.

Overall Japanese LNG imports dropped 14.7 percent in April as shipments from Asia, the Middle East and the spot market fell and thermal coal purchases were preferred to LNG for power generation as the nation reined in its energy spending.

The LNG imports amounted to 5.60 million tonnes in April compared with 6.57MT in April 2017.

Japan's LNG purchase in March had amounted to 7.93MT compared with 8.14MT in the same month the previous year.

Zeebrugge welcomes Ice-Class carrier for Scandinavian deliveries

LNG Journal editor

Zeebrugge LNG Terminal, owned by Belgian company Fluxys, has begun the first loading operations for the small-scale carrier "Coral EnergICE", an Ice-Class vessel designed to make year-round deliveries of break-bulk cargoes to Scandinavian ports.

"The "Coral EnergICE", owned by Dutch shipping line Anthony Veder, is designed to operate in the sub-zero temperatures of the Baltic Sea during all weather conditions," said Fluxys Belgium.

'Coral EnergICE' will mostly work out of Belgian port

Sweden

"The vessel has a loading capacity of 18,000 cubic metres and is currently assigned to make small-scale LNG deliveries to northern ports in Sweden and Finland," it added.

Fluxys Belgium sees itself as supporting the small-scale distribution of LNG through its special break-bulk jetty at Zeebrugge.

Fluxys explained that small LNG carriers have been able to load at the terminal since 2010 and the facility recently opened a second jetty specially designed for loading smaller ships such as distribution and bunkering vessels.

"The latter supply LNG to LNG-fuelled ships or small-scale storages. Parent company Fluxys is a partner in such a bunkering vessel which has Zeebrugge as its home port," said Fluxys Belgium.

"Recently Fluxys also started facilitating LNG bunkering in the port of Antwerp," it added.

The Zeebrugge import terminal imports cargoes from nations such as Qatar at the same time as developing the domestic and regional market for LNG fuel.

The nearby Dutch port of Rotterdam is also following the same strategy as both Belgium and the Netherlands market LNG northwards as well as into Europe via its extensive river transportation and barge trading system.

The Zeebrugge facility's customers in the road transportation sector can also load LNG trucks to supply local networks or industrial sites in Europe where pipeline supplies are unavailable.

UK Grain LNG terminal boosts truck loads as owner raises Brexit issue

National Grid, operator of the Isle of Grain liquefied natural gas import terminal on the River Medway in Kent, said in its annual report that it had loaded 3,950 road tankers with LNG for deliveries to off-grid customers in just over two years and also raised the issue of the post-Brexit situation.

The Grain LNG facility, the largest of three in the UK, has its main business as imports, though also allows road tanker operators to load and transport LNG in bulk across the country for the off-grid industrial sector.

The terminal's LNG truck loading began in November 2015 and its multi-bay facilities are operational all year round.

According to the report, Grain LNG posted an annual operating profit of £76 million ($102M) compared with £74M the previous year and remains a small part of the overall business.

Regasification capacity at the facility is held by BP and Centrica of the UK, France's Engie, Germany's Uniper, Spain's Iberdrola and Algerian energy company Sonatrach.

Grain LNG also provides berthing, temporary storage, ship reloading and re-gasification into the National Transmission System for cargoes from countries such as Algeria, Qatar and Trinidad.

National Grid also noted in the report that Grain LNG had received the first ever UK LNG cargoes from the US and Peru during 2017.

The facility received its shipment from the Sabine Pass plant in July 2017 and from the Peruvian Pampa Melchorita plant in March 2017.

Grain LNG is one of three UK import terminals, the others being the Dragon facility at Milford Haven in Wales and the South Hook terminal at the same port.

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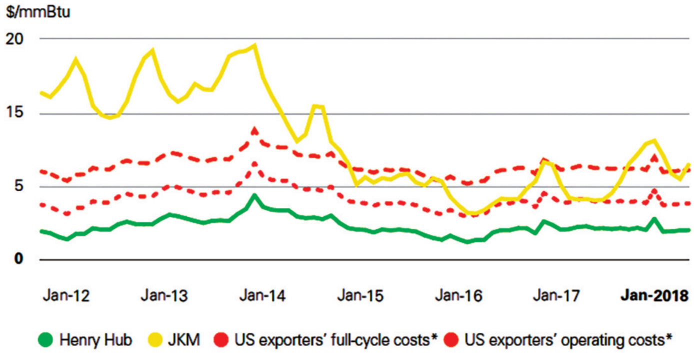
BP Statistical Review of World Energy notes natural gas trade expansion and absence of any LNG glut

LNG Journal editor

Global natural gas trade expanded last year by 63 billion cubic metres, or 6.2 percent, with growth in LNG outpacing growth in pipeline trading, according to the 67th edition of the BP Statistical Review of World Energy.

Natural gas consumption rose by 96 Bcm, its fastest since 2010 and led by China, the Middle East and Europe, while consumption in the US fell by 1.2 percent.

US LNG exporters' costs and Asian spot prices



Operating costs = 115 Henry Hub + $2/mmBtu (transport); Full costs also include liquefaction fee ($3/mmBtu).

BP cost analysis of US LNG shipped to Asian nations

Output

Production of natural gas worldwide increased by 131 Bcm, or 4 percent, almost double the 10-year average growth rate. Russian growth was the largest at 46 Bcm, followed by Iran at 21 Bcm.

The increase in gas exports was driven largely by Australian and US LNG, up by 17 and 13 Bcm respectively, and Russian pipeline exports that increased by 15 Bcm.

"The other central factor supporting the strength of global gas markets last year was the continued expansion of LNG, which increased by over 10 percent in 2017, its strongest growth since 2010, aided by the start-up of new LNG trains in Australia and the US," said the BP report.

"China's increased need for LNG accounted for almost half of the global expansion, with China overtaking Korea to be the world's second largest importer of LNG after Japan," it added.

"The tidal wave of LNG projects that were sanctioned between 2009 and 2014 led many to predict the emergence of surplus LNG as it took time for demand to catch up with the rapid growth in supplies," said the UK-based major.

"But many observers have so far been surprised by the apparent absence of such a glut," it observed.

"There is certainly little evidence of LNG facilities standing idle due to a lack of demand. This absence partly reflects that, due to a variety of technical issues, actual LNG supplies have come on stream less quickly than originally planned, moving supply more into line with the original demand profiles," BP explained.

The BP report stated that the apparent absence of a glut also reflects the fact that the surplus LNG supplies which did emerge resulted in bouts of unsustainably low prices rather than a build-up of idle capacity.

"In natural gas markets, another year of strong expansion of global LNG supplies helped to improve the accessibility of gas around the globe, with clear signs that the major regional gas markets are becoming increasingly integrated," said BP Group Chief Executive Bob Dudley.

"This greater accessibility and integration should help to underpin the long-term use of natural gas," added Dudley. ■

US forecasts rising LNG exports supported by increasing domestic natural gas production

Growing US natural gas output in 2018 and 2019 will support increasing shorter-term forecasts of more liquefied natural gas exports from Sabine Pass in Louisiana and Cove Point in Maryland.

The latest short-term forecasts from the US Energy Information Administration suggest LNG exports will average 3.0 billion cubic feet per day in 2018 and 5.1 Bcf/d in 2019 compared with LNG exports that averaged 1.9 Bcf/d in 2017.

"Dominion Energy's Cove Point LNG facility is ramping up exports," said the EIA.

"In April, the facility exported an estimated 13.4 Bcf, implying baseload utilization of 65 percent, and in May, it exported an estimated 23.5 Bcf, implying baseload utilization of 94 percent," said the EIA in its Short-Term Energy Outlook.

That's as overall US dry natural gas production averaged 73.6 Bcf/d in 2017 and will also be rising steadily.

"EIA forecasts dry natural gas production will average 81.2 Bcf/d in 2018, establishing a new record," said the report.

It then expects natural gas output will rise again in 2019 to 83.8 Bcf/d.

The EIA additionally forecasts the Henry Hub natural gas spot prices will average $2.99 per million British thermal units (MMBtu) in 2018 and $3.08/MMBtu in 2019.

New York Mercantile Exchange futures and options contract values for September 2018 delivery that traded during the five-day period ending in the first week of June 2018, suggest that a range of $2.38 per MMBtu to $3.57 per MMBtu encompasses the market expectation for September.

The share of US total utility-scale electricity generation from natural gas-fired power plants is seen rising from 32 percent in 2017 to 34 percent in 2018 and 2019, with the overall natural gas market underpinned by higher oil prices.

"Brent crude oil spot prices averaged $77 per barrel in May, an increase of $5/b from the April level and the highest monthly average price since November 2014," said the report.

"EIA forecasts Brent spot prices will average $71/b in 2018 and $68/b in 2019," it added.

"West Texas Intermediate (WTI) crude oil prices will average almost $7/b lower than Brent prices in 2018 and $6/b lower than Brent prices in 2019," stated the report.

The report forecasts that US crude oil production will average 10.8 million b/d in 2018, up from 9.4 million b/d in 2017 and will average 11.8 million b/d in 2019.

"EIA forecasts crude oil production from the Organization of the Petroleum Exporting Countries (OPEC) will average 32.0 million b/d in 2018, a decrease of 0.4 million b/d from the 2017 level," said the US agency.

"OPEC crude oil production is expected to increase slightly to an average of 32.1 million b/d in 2019," it added. ■