

Gas demand in transport sector to rise 3.5% annually to 478bcm in 2050: GECF



Gas demand in the transport sector has been forecast to rise at an annual pace of 3.5% over the GECF outlook period (until 2050), much faster than in other sectors, achieving about 478bcm in 2050. Transport utilisation will account for 8% of global gas consumption, Doha-based Gas Exporting Countries Forum (GECF) said in its latest outlook. In 2018, natural gas demand in the transport sector totaled 157bcm, constituting 4% of global gas consumption. Nearly 56% (87bcm) was related to the usage in pipeline transport, 44% to the road (58bcm) and marine (11bcm) segments, GECF said in its 'Global gas outlook 2050' released in Doha recently. GECF forecasts show that this robust gas demand growth rate will be encouraged by important progress in natural gas vehicles (NGVs), partially through policy initiatives aimed at offsetting transportation emissions, which account for more than 24% of global GHG

emissions. The International Maritime Organisation (IMO) regulations are also forecast to have an impact on gas demand in transport, as the maritime industry begins to switch to Liquefied natural gas (LNG). “In spite of the growing interest of gas applications in the railway industry, demand volumes in this segment are forecast to develop at a moderate pace, while road transport will drive consumption,” GECF noted. About 214bcm of incremental gas volumes to 2050 are expected to stem from the development of the global NGV market. The use of LNG as a marine bunkering will be another promising area with additional consumption of 76bcm within the forecast horizon. Overall, global gas demand in the land and marine transport segments (excluding gas used in pipeline transport) is projected to rise by about 300bcm, from 70bcm in 2018 to over 370bcm by 2050. It will correspond to a growth rate of 5.4% per year, GECF noted. The increasing availability of natural gas, together with its economic and environmental advantages, make NGVs a very prominent alternative to diesel and gasoline-based engines in road transport. Liquefied petroleum gas (LPG) is also widely used across the world. However, being a mixture of propane and butane it is not as clean as natural gas, whose main chemical component is methane. Over the last decades natural gas, predominantly in the form of compressed natural gas (CNG), has made remarkable progress in various sub-markets – passenger buses, light commercial vehicles (LCVs) as well as heavy-good vehicles (HGVs) and special mining and haulage company trucks. Surging by almost 17% per year, natural gas demand in the road transport segment increased from 4bcm in 2000 to about 58bcm in 2018. Major contributions to this growth came from Asia Pacific (China, India, Pakistan) and the Middle East (particularly, Iran), while Latin America countries (mainly, Argentina and Brazil) experienced moderate rise, staying around the same volumes from 2005 to 2018. In spite of the impressive growth rate, natural gas represents less than 2.5% of the total energy consumed in the global road transport market, which is currently dominated by oil-based products – gasoline and diesel – with a 96% share. As many

countries are adjusting legislation to reduce the environmental impact of transportation modes and setting targets to mitigate air pollution, GECF anticipates that the role of methane in this segment will grow over the forecast period, assuming a higher uptake of NGVs and a corresponding level of gas demand. Favourable government policies and regulatory frameworks are expected to be the forces driving increasing penetration of natural gas in road transport. The natural gas share of energy demand in the global road transport market (estimated to grow from 2,154mn tonnes oil equivalent – Mtoe in 2018 to 2,420Mtoe by 2050) – is forecast to rise from 2.5% in 2018 to 10% by 2050, while petrol and diesel will go down from 96% to 83%. Over the same period, electricity use is projected to increase from 0.3% to 6%, a much more impressive growth. Given that EV penetration into all vehicle classes is underway, they are considered to be a more realistic option for the passenger, public transport and LCV segments, while the potential of NGVs could be much higher in the HGV segment, where transport costs are more vital. Moreover, environmental regulations are set to be stricter, propelling fuel replacement in oil-based products. In this context, GECF noted the future prospects of natural gas will be mostly concentrated in HGVs, driven by anticipated restrictions on the use of diesel trucks in a range of countries. The majority of gas demand is expected to come from LNG powered trucks thanks to their high annual mileage. It is worth mentioning that governments of more than 10 countries in 2017-2019 introduced forward-looking sales bans on new diesel or petrol vehicles for 2025-2040, which represents an additional push for gas usage, GECF said.

Asian LNG prices fall on declining Chinese demand



- * Several cargoes trade below \$3 per mmBtu – sources
- * Four Asia-bound LNG tankers divert destination – sources
- * Fifteen LNG tankers floating cargoes at sea – Kpler (Updates to add graphic)

By Jessica Jaganathan

SINGAPORE, Feb 14 (Reuters) – Falling demand from China drove Asian spot prices for prompt deliveries of liquefied natural gas (LNG) to new lows this week of around \$2.70 per million British thermal units (mmBtu).

China's transport, commercial and industrial sectors have all been affected by the fast-spreading coronavirus outbreak, traders said.

The average LNG price for March delivery into northeast Asia LNG-AS fell to \$2.70 per mmBtu this week, down 25 cents from the previous week, several industry sources said.

Prices for cargoes delivered in April are estimated to be \$2.80 per mmBtu, they added.

Several cargoes exchanged hands this week at below \$3 per mmBtu, traders said, indicating there was too much supply in the spot market.

Russia's Sakhalin 2 plant has sold a cargo for loading on March 16 to Japan's Mitsui at \$2.70 to \$2.80 per mmBtu, industry sources said.

Gail (India) bought a cargo for delivery into Dabhol, India, on a delivered ex-ship (DES) basis for Feb. 23 to 28 delivery at \$2.40 to \$2.50 per mmBtu, they said.

It separately sold a cargo from the Cove Point plant in the United States on a delivered ex-ship basis into Europe for a February to March delivery, and likely did not award another cargo it had offered for loading in April from Cove Point, one of the sources said.

India's Reliance bought a cargo for delivery into Hazira in March at \$2.50 per mmBtu, the sources added.

India's GSPC bought 7 cargoes for delivery over April to October at prices ranging from \$2.50 to \$3.30 per mmBtu, they said.

The spot deals for February to March are the lowest the cargoes have ever traded, traders said.

The coronavirus outbreak that started in China and has affected more than 60,000 people globally has had a wide impact on LNG demand which had already been depressed from mild weather.

Four LNG tankers, including three Qatari vessels bound for North Asia, have changed destination or diverted after the coronavirus outbreak hit gas demand in China, sources said.

In addition, 15 LNG tankers are also flagged as “floating storage” globally, with 11 of them scattered across Asia, Rebecca Chia, LNG analyst with data intelligence firm Kpler told Reuters on Thursday.

Traders appear to have shrugged off cargo loading disruptions in Western Australia after a powerful cyclone that swept across parts of the region last weekend.

Supply was still ample with Angola LNG offering a cargo for March delivery, an industry source said. Colombia’s Calamari LNG is seeking late February delivery while Thailand’s PTT is seeking up to 2 cargoes, industry sources said.

France’s Total rejects force majeure notice from Chinese LNG buyer



ABERDEEN/SINGAPORE (Reuters) – French oil major Total rejected a force majeure notice from a liquefied natural gas (LNG) buyer in China, the first global energy supplier to push back publicly against a firm trying to back out of a contract amid the coronavirus outbreak.

The move by the Chinese buyer is likely to increase concerns that Chinese importers, or even exporters of product parts to global firms, could use force majeure certificates to get out of long-term contracts, trade sources said.

Companies invoke force majeure when they cannot meet their contractual obligations because of circumstances beyond their control.

The effect is being felt in the spot crude oil and LNG market as sales have slowed into China, the world's top energy consumer, increasing supplies and depressing energy prices.

Last week, a Chinese international trade promotion agency said it would offer force majeure certificates to companies struggling with the epidemic to give to their overseas

partners.

So far, most of the applications for the certificates had been from Chinese exporters, although there were a few inquiries from importers, a source familiar the matter said.

The outbreak, which has claimed more than 630 lives and infected over 31,000 people, has forced companies to shut factories and stores across China and led to flight cancellations as governments and firms curb travel.

“Some Chinese customers, at least one, are trying to use the coronavirus to say I have force majeure,” Philippe Sauquet, head of Total’s gas, renewables and power segment, said on Thursday.

“We have received one force majeure that we have rejected.”

Sauquet did not disclose the name of the buyer.

Total has about 10 LNG cargoes due to land in China this month and at risk of force majeure, according to a person familiar with the matter. Among 35 LNG tankers scheduled to land this month, Royal Dutch Shell and Qatargas, a unit of Qatar Petroleum, also have large Chinese exposures, the person said.

Total, Shell and Qatargas did not immediately reply to requests for comment on the cargoes at risk.

China National Offshore Oil Corporation (CNOOC), which sources said is among Total’s biggest LNG customers, declared force majeure on some prompt deliveries with at least three suppliers, Reuters reported on Thursday.

CNOOC did not respond to a request for comment.

“This rift has the potential to become quite ugly because of the contractual precedent it threatens to set,” said Ira Joseph, head of global gas and power analytics at S&P Global Platts.

Guangxi Nanguo Copper, a smelter in Southwest China, on Friday also declared force majeure on copper concentrate shipments, two sources briefed on the matter told Reuters.

MISUSE?

Prices of LNG supplied from long-term contracts are currently more than double the cost of spot cargoes.

Chinese companies including CN00C were offering to resell LNG cargoes in the spot market even before the outbreak, as they struggled to shift high inventory amid weak demand due to a slowing economy and a milder winter.

“There is a strong temptation from some long-term customers to try to play with the force majeure concept,” Total’s Sauquet said. “To say I cannot take my cargo under the long-term contract, but I would like to buy spot is contradictory.”

LNG contracts are typically governed by English law which spell out events constituting a force majeure and some may include the epidemic clause, lawyers told Reuters. Serving the force majeure notice is the first step in a drawn out process, they said.

Also, the onus to demonstrate a force majeure is on buyers to prove that they are not physically able to receive the cargo. For instance, if there are port closures or if workers are unable to get to the ports due to the virus.

“Force majeure is usually aimed at dealing with events such as unforeseen operational outages, rather than changes in broader economic circumstances, such as LNG demand or exchange rates,” said Rob Patterson, partner at law firm Haynes and Boone.

Commodity chaos deepens as China LNG buyer invokes force majeure

SINGAPORE: The turmoil engulfing global commodity markets deepened as China's biggest buyer of liquefied natural gas (LNG) told suppliers it won't honour some contracts because of the coronavirus.

In a dramatic and rare step, China National Offshore Oil Corp (CNOOC) declared what's known as force majeure, meaning it won't take delivery of some LNG cargoes, because the virus is constraining its ability to import the fuel. It's among the first known cases of the legal clause being invoked in commodity contracts as a result of the epidemic.

While global markets bounce back from initial fears over the impact of the virus, CNOOC's move shows the fallout is only deepening in the world of raw materials, which is dominated by China's enormous appetite. Beijing's efforts to contain the disease by shutting down swathes of the country and restricting travel are disrupting supply chains and hammering demand in the world's biggest consumer.

The impact is reverberating around the world. Copper buyers are requesting Chilean miners postpone shipments because of port shutdowns while China's biggest oil refiner, Sinopec Group, is likely to ask Saudi Arabia to reduce supplies of crude oil next month. Soybeans from Brazil and the United States are being held up on arrival in eastern China and Indonesian palm oil shipments are also being delayed.

For LNG, CNOOC's force majeure hurts a market already buffeted by rising US supplies and weak demand after a mild winter in Europe and Asia. Even before Chinese buyers walked away from supply contracts, spot prices have fallen to a record low,

crippling the profitability of energy giants like Royal Dutch Shell Plc and Exxon Mobil Corp.

CNOOC sent the force majeure notice to suppliers including Shell and Total SA, according to people familiar with the matter, who asked not to be identified because the matter is confidential. Shell declined to comment while Total's press office didn't respond to a request for comment. The French company's chief executive said he hadn't received the force majeure notice.

China said last week that it would offer support to companies seeking to declare force majeure on international contracts. The clause allows a company to opt out of obligations without legal recourse because of reasons beyond its control.

CNOOC isn't the only Chinese LNG buyer affected. The country's largest oil and gas firm, PetroChina Co, was forced to delay discharge timings for multiple cargoes because it can't get enough workers to its Rudong, Dalian and Caofeidian LNG terminals to run them at full capacity. The company hasn't invoked force majeure because of the delays. – Bloomberg

US says it has thwarted \$6bn Russia-Germany gas pipeline



Bloomberg/Munich

President Donald Trump's top energy official said he's confident that Russia won't be able to complete the Nord Stream 2 gas pipeline in the Baltic Sea – and signalled that the US will press forward with its opposition to the project. Asked about Russian efforts to circumvent US sanctions on the pipeline by completing it on its own, US Energy Secretary Dan Brouillette said "they can't" – and dismissed claims that project owner Gazprom PJSC will face only a short delay.

"It's going to be a very long delay, because Russia doesn't have the technology," Brouillette said in an interview at the Munich Security Conference on Saturday. "If they develop it, we'll see what they do. But I don't think it's as easy as saying, well, we're almost there, we're just going to finish it."

The pipeline, which would pump as much as 55bn cubic metres of natural gas annually from fields in Siberia directly to Germany, has become a focus for geopolitical tensions across the Atlantic. Trump has assailed Germany for giving "billions" to Russia for gas while it benefits from US protection.

Nord Stream 2's owners had invested €5.8bn (\$6.3bn) in the project by May 2019, according to company documents.

US sanctions in December forced Switzerland's Allseas Group SA, which was laying the sub-sea pipes, to abandon work, throwing the project into disarray. The US has said Europe should cut its reliance on Russia for gas and instead buy cargoes of the fuel in its liquid form from the US.

"It's distressing to Americans that, you know, Germany in particular and others in Europe would rely upon the Russians to such a great degree," Brouillette said, adding that he is unaware of additional sanctions should Russia move to defy the US.

Even as he spoke, signs emerged that Gazprom's attempts at completion may be underway. A Russian pipe-laying vessel, the Akademik Cherskiy, left the port where it had been stationed in Nakhodka on Russia's Pacific coast last Sunday. Russian Energy Minister Alexander Novak last year mentioned that vessel as an option to complete the pipeline in Denmark's waters. The vessel is now expected to arrive in Singapore on Feb. 22, according to ship-tracking data on Bloomberg.

Akademik Cherskiy pipe-laying vessel started moving, only to indicate Singapore as its next indication.

While Gazprom has said it's looking at options to complete the pipeline, it hasn't given any details on where it will find the ship to do the work. One of the pipeline's financial backers, Austrian gas and oil company OMV AG, has predicted that the Russians will follow through. "From my point of view, they will find a solution," Rainer Seele, OMV's chief executive officer, told Bloomberg on Saturday.

The pipeline was just weeks away from completion, with 94% already constructed, when US sanctions halted work. There's a small section in Denmark's waters that needs to be finished. Before the halt, Nord Stream 2 hoped to finish construction by the end of 2019 or in the first few months of this year. That would allow gas deliveries in time to supply Europe by winter 2020-2021.

Besides OMV, Nord Stream 2's other European backers

Permian poised for 'aggressively negative' gas amid supply swell



Natural gas prices in America's biggest shale basin are going negative again as production surges faster than pipelines can be built to take it away. Gas for March delivery at the Waha hub, located in the Permian Basin of West Texas, has been trading below zero over the past week, Bloomberg Fair Value prices show. The rout is poised to get even worse as supplies swell, according to commodities broker OTC Global Holdings.

Permian gas prices went negative for the first time in the spring of 2019, rebounding when Kinder Morgan Inc's Gulf Coast Express pipeline started up in the fall. History is repeating itself this year as gas output from the basin continues to soar, with the next major conduit not expected to enter service until later in 2020. Permian explorers extract the fuel as a byproduct of oil drilling, making them less responsive to tumbling gas prices.

“We just have an ocean of gas and there is just nowhere to go with it,” said Campbell Faulkner, chief data analyst for OTC. “I think we are going to see aggressively negative spot prices. That just puts a real chill around the gas market.” The dearth of Permian pipelines has contributed to an uptick in flaring, the process of burning gas off instead of capturing it from the well. Flaring, which produces carbon dioxide, has come under increasing scrutiny amid growing concern about climate change. Weaker prices in the basin, though, could be a boon for would-be exporters like Tellurian Inc and NextDecade Corp that plan to tap Permian supply and ship it to Europe and Asia. Gas for next-day delivery at the Waha hub dropped as low as minus \$4.63 per million British thermal units last spring, according to the Bloomberg Natural Gas Composite price.

While spot gas is still in positive territory, trading at \$1.58 on Wednesday, prices for March delivery suggest that won't last long. “The forward curve this time last year wasn't great, but it wasn't as bearish,” Faulkner said. “I'm looking at this and thinking this isn't bearish enough.”

Qatargas achieves major milestone with North Field Bravo Living Quarters Expansion project



Qatargas has achieved a major milestone with its North Field Bravo (NFB) Living Quarters Expansion (LQX) Project as it safely and successfully completed the onshore fabrication of the living quarters' structure locally, a first in the country.

The fabrication was done by Nakilat-Keppel Offshore Marine (N-KOM) at the Erhama Bin Jaber Al Jalahma Shipyard. The project is significant for Qatar as it is for the first time that a major offshore living quarter's structure has been entirely fabricated at a local yard in the country.

Qatargas organised a ceremony to mark the sail-away of the jacket and topside of the structure at Ras Laffan. The event was attended by Qatargas' shareholders and senior executives, N-KOM, and the project's contractor, Rosetti Marino.

"This project is a historic milestone for Qatar as it highlights a new and important capability. This achievement showcases the capabilities, skills and resources which are available locally at the Erhama Bin Jaber Al Jalahma Shipyard for the fabrication of large and complex offshore structures," said Khalid bin Khalifa al-Thani, chief executive, Qatargas.

Qatargas had awarded the engineering procurement and construction contract for the LQX project to Rosetti Marino that undertook engineering designs in Italy. All the fabrication work was undertaken by N-KOM at the Erhama Bin Jaber Al Jalahma Shipyard at Ras Laffan Port.

The project provides for additional living quarters which will increase the capacity of the NFB Offshore living quarters by 90 personnel on board. When fully installed, this will allow for the catering of additional operational requirements.

The project work scope includes the construction of a four-legged jacket and piles weighing about 2,200 tonnes. This will support the new living accommodation platform weighing around 2,800 tonnes and consisting of five decks, a fully equipped helideck, six bridge links to existing living quarters, services and utilities.

The project has recently achieved 2.5mn safe man-hours without any lost time incidents with a peak manpower rate of over 900 people. The next major milestone of the project is the safe transportation and installation of the 5,000 tonnes of structure to offshore NFB this month. The load out, sail away and installation activities will be carried out by subcontractor Heerema using their heavy lift vessel 'Aegir'.

"This project is not only a milestone achievement for Qatar but also an excellent testament to N-KOM's experience in handling offshore fabrication projects," according to Nakilat chief executive Abdullah Fadhalah al-Sulaiti.

The original NFB accommodation, installed in 1995, was designed for the operational needs of Qatargas Trains 1 and 2. The offshore accommodation expansion project was initiated to cater to the changes in the operational requirements following various expansion projects. Brownfield modifications will also be done on the existing living quarters and platform to properly integrate the new additional living quarters.

Qatargas delivers 'commissioning LNG cargo' to India's newest Mundra terminal



Qatargas has supplied a commissioning liquefied natural gas (LNG) cargo for India's newest LNG receiving terminal – Mundra, located on the west coast of India.

The cargo was loaded in Ras Laffan on January 17 on the Q-Flex LNG vessel, Murwab, with an overall cargo carrying capacity of 216,000 cubic metres. It arrived at Mundra terminal on January 22.

Mundra is the second LNG terminal that Qatargas helped commission in India within the past year. It followed an earlier commissioning cargo, which was delivered by the company to the Ennore LNG receiving terminal, near the southern Indian city of Chennai, in February 2019.

The Mundra terminal is located in Adani Ports and Special Economic zone in Kutch district of the western Indian state of Gujarat.

The terminal's nominal capacity is 5mn tonnes of LNG per year

(mtpy), and it can receive vessels with a capacity between 75,000 cubic metres and 260,000 cubic metres. The terminal comprises of two storage tanks – each with an overall capacity of 160,000 cubic metres.

Qatargas has established a strong partnership with India since July 1999 when it started supplying LNG to Petronet. Since then it has delivered more than 2,000 cargoes under its various long-term sales and purchase agreements as well as supplying significant volumes into the short term and spot markets.

India is a key market for Qatargas given its geographical proximity and growth potential. Upcoming developments such as new terminals and other gas related infrastructure will increase India's capacity to import LNG from 30mn tpy to 44mn tpy, a 46% increase as India continues to make strides in achieving its ambitious target of 15% gas in the energy mix.

Turkey, Greece brace for standoff over Cyprus gas drilling plans



**Privatisation matters:
Foreign investors express
interest in LNG plants**



ISLAMABAD:

Pakistan has managed to secure broad-based interest in the privatisation of multibillion-dollar liquefied natural gas (LNG)-fired power plants as a dozen global and local companies, including a military-backed local consortium, have shown interest by the end of the extended deadline.

As traditional aspirants, China and Saudi Arabia, have stayed away from the process, non-traditional investors from Japan, Thailand, the United Kingdom and Malaysia have come forward and submitted statements of qualification.

The Privatisation Commission had floated Expressions of Interest (EOI) in November last year, inviting local and global investors for the acquisition of nearly 2,500-megawatt two power plants, fuelled by Qatar's LNG.

"Till the expiry of the deadline on Friday, 12 reputed international and local firms have submitted statements of

qualification,” Privatisation Secretary Rizwan Malik told The Express Tribune. “We have secured sufficient competition and once pre-qualified, these companies can make four to five competitive consortiums,” said the secretary.

National Power Parks Management Company Limited (NPPMCL) owns the two power plants located at Balloki and Haveli Bahadur Shah with combined generation capacity of 2,453 megawatts. The government wants to sell NPPMCL in the hope of fetching a minimum of Rs300 billion or \$1.5 billion in non-tax revenue.

In the next step, the Privatisation Commission will evaluate the prospective investors and pre-qualify them for taking part in the bidding process. Pre-qualified firms will have around two months for conducting due diligence of the power plants.

Once the due diligence is done, the Privatisation Commission will announce the bidding date. “We expect to announce the bidding date by the end of March,” said the privatisation secretary.

Adra Power, Malaysia’s second largest independent power producer, has submitted documents. Adra was the only company that had submitted the statement of qualification before December 23 – the original deadline, which was subsequently extended for three weeks. Out of 12, nine companies are from Europe and Asia, depicting broad-based interest in one of the largest privatisation transactions in the history of Pakistan.

Two companies from Qatar have submitted the statement of qualification. Nebras Power, Qatar, is a global power development and investment company. The other party is Qatar Investment Authority.

The two power plants are run by LNG that Pakistan imports from Qatar under a 15-year deal, signed in 2015. However, the Power Division has claimed that due to the availability of cheap alternative fuels, the consumers will have to pay extra Rs471 billion from 2019 to 2025, if these power plants are run on

imported LNG.

Three Japanese companies have also shown interest in acquisition of the power plants. Marubeni is a major Japanese integrated trading and investment business conglomerate. Jera is a joint venture between Tepco FP and Chubu Electric Power and Mitsu and Co Japan has also submitted documents.

ASMA Capital Partners BSC of Bahrain has also shown interest. It is a multi-fund asset management firm incorporated in Bahrain. Global Power Synergy Company Limited, Thailand and Contours Global UK have also submitted documents.

Three local firms have submitted documents. A consortium of Fauji Fertiliser, Fauji Foundation and Mari Petroleum has come forward for the acquisition of the two power plants. Kot Addu Power Company and Atlas Power have also submitted bids.

However, China and Saudi Arabia have stayed away and their companies did not submit the statement of qualification till the closing time. In a bid to convince Chinese investors, the privatisation secretary met with the Chinese ambassador in Islamabad this week.

Chinese investors were reluctant to come forward due to the usual bureaucratic inefficiencies that had also delayed the sale of a majority stake in K-Electric to a Chinese company. The sale of Abraaj Group's stake in K-Electric to Shanghai Electric has been delayed by over three years.

About 19 companies procured documents from the Privatisation Commission including around 14 foreign firms after the government invited the EOI.

The Rs300-billion revenue is very crucial for the finance ministry, which is already struggling to manage budget books due to an anticipated shortfall of Rs700-Rs800 billion in Federal Board of Revenue's annual tax collection target of Rs5.5 trillion. The FBR has already suffered a shortfall of

Rs284 billion in six months of the current fiscal year.

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