LNG North America

Includes: Market Tracker Data

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US LNG gets cheaper in Asia once Panama congestion eases in early 2021

Freight rates for shipping US LNG to Asia will fall once the Panama Canal congestion eases in early February 2021. However, analysts expect Northeast Asia's call on US supply will fall as the region burns less gas for power generation and relies more on rival supplies from Australia or Middle East.

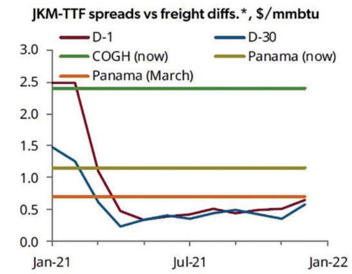
Price spreads between the Japan Korea Marker (JKM) and Dutch TTF gas trading hub will tighten from current levels, the widest since September 2019, as soon as the marginal cargo in Northeast Asia is no longer a US shipment via the Cape of Good Hope because of Panama Canal congestion. Energy Aspects thinks "that will happen before year-end" as Northeast Asian LNG customers increasingly turn to non-US suppliers, or shift from burning natural gas to hydrogen or other green fuels.

Following the JKM Jan-21 contract expiry on 15 December, the JKM-TTF near-curve is expected to tighten in line with the easing of the Panama Canal congestion from January. Freight rates will then fall – although it will take time for vessels to be made available for spot charter again.

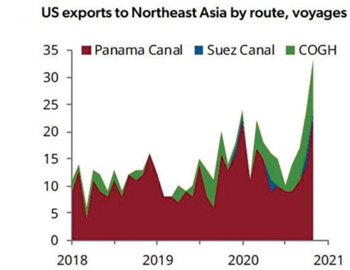
The extra shipping cost linked to a 97-day round trip for a US cargo to Northeast Asia via the Cape of Good Hope (COGH) relative to delivering to Europe is $2.40 per MMBtu at prevailing freight rates and boil-off costs. The Panama route only costs $1.16 per MMBtu extra at current rates. Hence, analysts are convinced "spreads will tighten sharply once the COGH route is eliminated."

Australian supply to outcompete US cargoes

Rival supply in the Pacific basin, equivalent to around 8-14 cargoes per month compared to today, will help reduce Northeast Asia's demand for US LNG cargoes. Shorter voyages, cheaper shipping costs and more attractive net-backs make Australian supply the preferred option for Asian buyers.



Source: CME, Fearnleys, Energy Aspects
*freight differentials for Northeast Asia to attract US cargoes instead of Europe



Source: Kpler, Energy Aspects

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Alaska Gasline strives to take over troubled Alaska LNG project

Former Alaska Governor Bill Walker and the ex-head of the state-backed Alaska Gasline Development Corp. (AGDC) and its LNG project, Keith Meyer, have set up a company and offered to take over the export venture. AGDC is currently vetting buyers and aims to transfer the project to a private entity by June 2021.

"You know we're not out to get rich off of this project, we want to make it happen," Walker noted in a statement of the newly founded Alaska Gasline & LNG. If the state would turn the project over to Alaska Gasline & LNG LLC, then Meyer's and Walker's new company want to complete construction by 2028.

State of Alaska policymakers had repeatedly made it clear that adequately funded third parties will need to finance Alaska LNG construction and lead the project forward. AGDC has hence called on "any party with the appropriate resources and qualifica-

continued on page 2

Render of the Alaska LNG project

AGENDA

continued from page 1, top story

Energy Aspects forecasts Australia's 3.6 mtpa Prelude facility will return by year-end, followed by the return of Gorgon's full 15.6 mtpa capacity at the end of January 2021 – assuming no weld faults are found in trains one and three. The restart of production at Qatargas's 7.8 mtpa train four at Ras Laffan also boosts supply, as will the ramp-up of Egyptian output—particularly from Idku, with some potentially from Damietta.

Asian demand seen softening

Aggregate gas demand across China, South Korea and Japan is seen softening to 17.9 million tons per month on average in January-February 2021 from 19.3 million tons this month, decrease of around 19 cargoes per month.

Most of that fall is driven by Japan and South Korea, where nuclear availability is reducing gasburn in the power sector. Energy Aspects consequently expects both countries will "ride down LNG terminal stocks, and China will also reduce its underground stocks which had been replenished in recent months.

Strong spot LNG buying activity from Korea's KOGAS will likely come to an end once the government will lift is mandatory coal-fired plant closures over December 2020–March 2021. Some nine to 16 of the most emission-intensive power plants have been closed, one more than in the previous winter period.

Analysts caution it will not be known know how aggressive March 2021 closures will be until February 2021, meaning there are risks to the outlook for Northeast Asia's LNG take in late Q1-2021. ■

New US President at odds with Nord Stream 2

Though US President Joe Biden is determined to "radically alter American energy policy" and pledged a ban on new leasing, the controversy with Germany over Nord Stream 2 is unlikely to disappear.

The disputed Nord Stream 2 pipeline that runs between Germany and Russia through the Baltic Sea, for example, has been a favourite target of the Trump administration – but the sanctions imposed on it were also backed by the Democratic congress. Similarly, US pressure to increase its footprint on European gas markets through an import terminal for shipped LNG in Germany, will persist also once the new administration takes over.

Germany "not a hurry" to import US LNG

Start-up of the second Nord Stream leg would increase the pipeline's overall transport capacity to nearly 99 bcm per year which is bound to greatly reduce Germany's need for LNG imports.

Low prices for pipeline gas imports have rendered the economics of building a German LNG import plant less attractive. The Government's maritime coordinator, Norbert Brackmann, said companies are moving forward with their investments, though "not in the greatest hurry."

Trump has been brand-marking both NordStream and TurkSteam as "the Kremlin's key tools" to exploit and expand European dependence on Russian energy supplies. "Get out now or risk the consequences," he said when announcing the U.S. Department of State was updating public guidance for the 'Countering America's Adversaries through Sanctions Act (CAATSA)' authorities to include these projects.

Botas and Gazprom, meanwhile, are trying to calmly continue with works on the second leg of the controversial TurkStream pipeline. The Russia-Turkey interconnector through the Black Sea consists of two 930-kilometer offshore lines through the Black Sea as well as two separate onshore lines that are 142 and 70 kilometres long and extend to Greece and Bulgaria. ■

German Chancellor Angela Merkel meets then US Vice President Joe Biden in Berlin in 2013

continued from page 1

tions to help advance the Alaska LNG project."

Meyer said the next step was to move the project into the market for investors. "It's a very good time in the LNG industry, the world is moving to natural gas as a much cleaner hydrocarbon. So we now have 42 countries that import LNG," he said.

In June 2020, AGDC released an updated $38.7 billion cost estimate for the LNG project, a reduction of $5.5 billion from the previous estimate compiled in 2015 by the project's previous joint venture partners, the UK major BP, ExxonMobil, ConocoPhillips and AGDC.

The US Federal Energy Regulatory Commission (FERC) finally approved permits for the construction and operation of the Alaska project in May 2020. Analysts noted that obtaining FERC approval significantly de-risked the project execution with defined environmental stipulations. The project was launched 10 years ago and there was still some hope that LNG would be produced and exported before the end of the decade.

Chinese energy companies and banks had previously expressed interest in taking part in the Alaska venture, though they disappeared from the picture when the US-China trade dispute broke out.

The FERC permit grants building consent for a liquefaction facility on the Kenai Peninsula designed to produce up to 20 million tonnes per annum (mtpa) of LNG for export. It also includes permission to construct and operate a pipeline of around 800 miles in length and capable of transporting up to 3.9 billion cubic feet of gas per day to the liquefaction facility from a gas treatment plant located at Prudhoe Bay in the North Slope, as well as two additional natural gas pipelines connecting production units to the gas treatment plant.

The US Department of Energy (Do) has previously authorized export permits for 20 mtpa to be supplied to nations with or without a Free Trade Agreement with the United States. ■

LNG North America

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LNG Journal

Epclion gets pipeline and re-export permits for Mexican LNG project

Mexico's Epclion LNG project, owned by Singaporean investors, has been authorized to import pipeline gas to Mexico and re-export it as LNG to nations without a Free Trade Agreement with the United States for a period of 20 years. The Sonora-based project will have two liquefaction Trains and will be named 'Amigo LNG'.

Each processing Train will have the capacity to produce 3.9 million tonnes per annum of LNG for a total of 7.8 mpta, specified the owner Singapore LNG Alliance, which also aims to develop projects near Chennai, India.

Amigo LNG will be built at this coastline in Sonora, Mexico

The non-TFA permit for Amigo LNG will allow the export of 395 billion cubic feet per annum (1.083 billion cubic feet per day) of US-sourced natural gas from Sonora, Mexico, to buyers in Asia and beyond.

According to Epcilon, the primary routing includes transportation of natural gas sourced from the Waha Hub near Fort Stockton in Texas on the Trans-Pecos Pipeline to the US-Mexico border near the town of Presidio, situated on the Rio Grande River in Texas.

"From Presidio, Texas, the natural gas will flow to the interconnected El Encino Pipeline (operated by Infraestructura Energética Nova, or IEnova – a Sempra company), to the Topolobampo Pipeline (operated by TC Energy of Canada), and into the Guaymas Pipeline (operated by IEnova) at the El Oro interconnection," it told the DoE.

Epcilon also stated that the LNG facility would be served by a short lateral connected to the Guaymas Pipeline. ■

DoE extends Golden Pass and Delfin LNG's licences through 2050

The US Department of Energy (DoE) has extended the terms of seven long-term LNG export authorizations through 2050 to help preserve what it said was "a vital energy source for its friends and allies." The permits include Golden Pass, Texas LNG, Magnolia and Delfin LNG.

Golden Pass project is owned by Qatar Petroleum and ExxonMobil whereby the terminal is currently being transformed into an export plant. The 8.8 mtpa, four train Magnolia plant is proposed for a 115-acre site near the Calcasieu Ship Channel. Both Texas LNG and Magnolia are controlled by Glenfarne, a New York-based fund specialising in energy infrastructure investment.

Tellurian Inc.'s Driftwood venture at Lake Charles in Louisiana and the Delfin LNG project, proposed for offshore Louisiana, are on the list as well. The Delfin FLNG project is based on the deployment of floating liquefaction facilities with other moored production and storage vessels. Developers already have a deepwater port licence as well as US Coast Guard approval.

Sempra Energy, the owner of the Cameron LNG plant in Louisiana, also sees and extension linked to its Costa Azul project on the Pacific Coast of Mexico. Costa Azul, which recently reached a final investment decision for its mid-scale project, has DoE authorization to import and liquefy US-sourced natural gas for export from Mexico.

The latest issuances extend each project's LNG export authorization to non-free trade agreement (non-FTA) countries through December 31, 2050, and the move follows 10 LNG export term extensions previously issued in October. DoE's Under Secretary of Energy Steven Wineberg said: "It is important us to do everything to assure a long-term future for US LNG exports, which will continue to meet global energy security."

Including the term extension applications just granted, long-term LNG export authorizations with export terms through 2050 are now held by 13 US LNG export projects, as well as the Costa Azul project in Mexico. ■

View of Golden Pass at the Calcasieu Ship Cannel

DoE issues rule make LNG export projects easier to license

The US Department of Energy (DoE) has issued a rule to exclude some licensing and environmental requirements for liquefied natural gas export projects that had previously been required in a show of support for the energy industry by the outgoing Administration of President Donald Trump.

The rule, which the Department of Energy issued in a pre-publication notice in the Federal Register, frees LNG export and import license applications from including environmental reviews that had been required under an environmental law, the National Environmental Policy Act.

The DoE said it was updating its National Environmental Policy Act (NEPA) implementing procedures pertaining to authorizations issued under the Natural Gas Act.

"These changes will improve the efficiency of the DoE decision-making process by saving time and expense in the NEPA compliance process and eliminating unnecessary environmental documentation for these actions that the DoE has determined normally do not have significant effects," said the filing to be published in the Federal Register on December 4, 2020.

The DoE said in the notice that the rule would "save time and expense in the NEPA compliance process". The rule is effective 30 days after December 4 Federal Register publication.

President Biden could overturn DoE ruling

Analysts said there was a possibility that the incoming President Joe Biden could overturn the DoE ruling. President Trump was keen to supply US allies with LNG and the largest recipients of cargoes have been to countries like South Korea and Japan as well as European countries which have been taking US LNG cargoes as an available alternative to Russian pipeline natural gas.

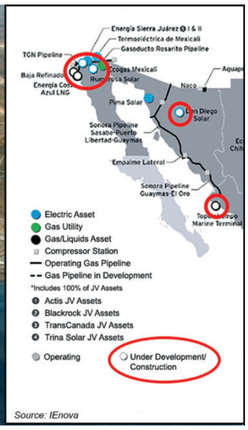
The DoE rule would not affect environmental reviews by the Federal Energy Regulatory Commission, the other government office that reviews LNG projects. ■

Fresh financing for Costa Azul LNG as developers agree $1.5 billion loan

Sempra Energy affiliate, ECA Liquefaction, together with Total have agreed a five-year loan with a variety of banks for up to $1.5805 billion to underpin Costa Azul LNG export project in Mexico. The financing has three tranches, linked to the commitment of each joint venture partner.

Sempra's Mexican subsidiary IEnova disclosed the financial institutions that took part in the Costa Azul project financing for its tranche were the Bank of Nova Scotia, Sumitomo Mitsui Banking Corp. of Japan, Spanish bank BBVA Securities, and Banco Nacional de México with its Banamex financial group.

Earlier, Sempra and IENova said their Costa Azul project had signed an equity investment agreement with Total, giving the French company a 16.6 percent equity stake in the first phase of Costa Azul, with Sempra and IEnova each retaining 41.7 percent ownership.



Costa Azul LNG bird's eye view

Total also has a 20-year sale and purchase agreement for around 1.7 mtpa of Costa Azul volumes.

EPC underway

Technip Energies, the LNG and energy project contract division of TechnipFMC, received a notice to proceed for its Costa Azul LNG engineering, procurement and construction contract following the positive final investment decision taken by Sempra and its partners in November 2020.

The Franco-US company had been involved in Costa Azul, an existing LNG import terminal, since 2017, including the delivery of the front-end engineering and design (FEED) for the transformation into an export plant.

Share swaps

Sempra is also currently arranging various transactions Energy under which its publicly-held stake in IEnova would be exchange for Sempra Energy shares. Initially, Sempra owned over 66 percent of IEnova and made a tender offer for the outstanding shares listed on the Mexican stock exchange, the Bolsa Mexicana de Valores (BMV), to be swapped for Sempra Energy shares.

The Mexican share deal was necessary to clear the way for the pooling of Sempra's LNG and natural gas and renewable assets into one company to be called Sempra Infrastructure Partners. Sempra said it expected all transactions to be completed in the first quarter of 2021.

After this time, Sempra's LNG portfolio would be united under one company with potential total production volumes of 45 mpta. ■

Appalachian frackers report $504 million in negative free cash flow

Nine shale gas producers in the US Appalachian Basin have spent half a billion dollars more during Q3-2020 on drilling and new projects than they earned. According to the Institute for Energy Economics and Financial Analysis (IEEFA), eight of these nine fracking companies cut Capex substantially but still incurred losses.

Range Resources cut its quarterly capital costs to $72 million, some 60% less than the $178 million it spent during the third quarter of 2019. Only National Fuel increased Capex during the quarter, primarily because it bought Shell's dry gas assets in July.

Besides Shell's "fire sale" of its Appalachian assets, ExxonMobil appears likely to include some of its North American gas assets in a planned fourth-quarter impairment that could reach $20 billion.

Some firms "barely stay afloat"

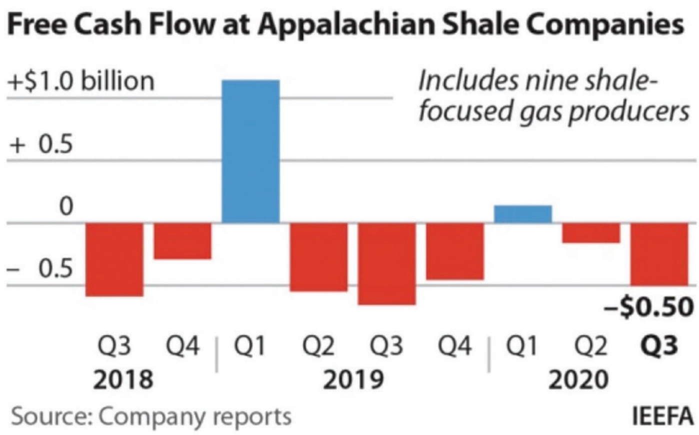
Slashing capital spending and delaying projects, has "barely kept some Appalachian frackers afloat as they struggle to survive weak demand and low prices," analysts commented. Several wildcatters have resorted to some form of financial hedging in an effort to achieve a positive cash flow.

EQT, which cut its quarterly Capex by 40 percent from last year's levels, reported making $252 million from commodity derivatives during the third quarter of 2020.

Regional pricing trends put shale fracking firms at a disadvantage to conventional gas producers. Though Henry Hub gas prices increase during the third quarter, prices at the Dominion South hub—where Appalachian gas is often priced—were less than three-quarters of the Henry Hub price at the end of the quarter.

Wildcatters in the Appalachian also curbed shale gas output, but the reduction in supplied had little effect in propelling up prices as demand remains sluggish. The U.S. Energy Information Administration (EIA) expects that gas consumption will be down by 2 percent this year and another 5 percent next year.

"Without a sustained price rebound and renewed capital investments, market watchers can expect Appalachian gas producers to continue to shrink, both in their gas output and in their financial health," IEEFA energy analyst, Clark Williams-Derry concluded. ■



Cheniere forges ahead with Sabine Pass Train 6

Cheniere Energy, the largest US LNG exporter, has told regulators that its Sabine Pass Train 6 project was now more than 44 percent complete as Bechtel is forging ahead with construction works. Train 6 is expected to be in service in 2022, taking the output at Sabine Pass to 30 mtpa.

Bechtel workers at the construction site for Sabine Pass Train 6

In December, Bechtel worked on the LNG spill trench south of the leave-out at the propane condenser rack and completed all remaining concrete works in the areas known as Outside Battery Limits (OSBL). Other works included setting filter houses in the compressor area as well as relating waste heat recovery units and gas turbine exhaust stacks.

"Currently, engineering is 98.8 percent complete, procurement is 99.8 percent complete, sub-contracts are 53.9 percent complete and construction is 44.1 percent complete," Cheniere specified in its filing to the Federal Energy Regulatory Commission (FERC).

Sabine Pass currently has five fully operational Trains in operation with each capable of producing up to 5 mtpa of LNG. Cheniere pointed out these five Trains have been brought online an average of seven months ahead of schedule, and all within budget.

Corpus Christi LNG, Cheniere's second plant in Texas, currently has three Trains in operation, each capable of 5 MTPA of production. Train 3 shipped its first commissioning cargo in November 2020.

Cheniere is also developing a mid-scale expansion called the Stage 3 project, which proposes up to seven Trains that would add around 10 mtpa, taking aggregate production capacity at the Texas facility to 25 mtpa. ■

Future of Jordan Cove LNG uncertain as Pembina takes charge on Ruby Pipeline

Pembina Pipeline Corp., the Canadian infrastructure company, said there was still uncertainty surrounding the future of its Jordan Cove LNG export project in the northwest US state of Oregon as Pembina planned to take a natural gas pipeline one-off charge in the fourth quarter.

Ruby, an interstate pipeline, delivers gas from the Opal Hub in Wyoming to the Malin Hub in Oregon, on the California border. It has approximately one billion cubic feet per day of capacity under firm contracts, which expire in 2021 and 2026.

Pembina, based in Calgary in the Canadian province of Alberta, said the existing tariff rate on firm contracts on the Ruby Pipeline that expire in mid-2021 are well in excess of the current spot rates.

"As such, based on the upcoming expiries and prevailing interruptible tariff rates, along with Rockies basin fundamentals, and the ongoing uncertainty with respect to the timing of the ultimate approval of the Jordan Cove LNG Project, which would ultimately be expected to utilize capacity on the Ruby Pipeline, Pembina expects to take a material impairment on its investment in Ruby," explained Pembina. The impairment will be in the fourth-quarter 2020 earnings when they are issued in early 2021.

The pipeline and project company said that as of the end of September 2020, the carrying value of Pembina's investment in the Ruby Pipeline was C$1.3 billion (US$1.02Bln).Pembina owns a 50% convertible and cumulative preferred interest in the Ruby Pipeline, which provides for distributions of US$91 million annually.

Feed-gas through Malin Hub

The 7.8 mtpa Jordan Cove project includes the separate 230-mile Pacific Connector Pipeline which would traverse four counties in Southern Oregon on route to the liquefaction plant. Feed-gas for Jordan Cove would be sourced at the Malin Hub, creating a new outlet for natural gas from areas such as the Rockies Basin. Pembina also seeks to re-activate the Phase VII Peace Pipeline Expansion and Empress cogeneration Facility growth projects.

Jordan Cove is expected to be visited by about 120 LNG carriers per year and Pembina has signed preliminary accords with JERA and Itochu of Japan for the supply of cargoes. ■

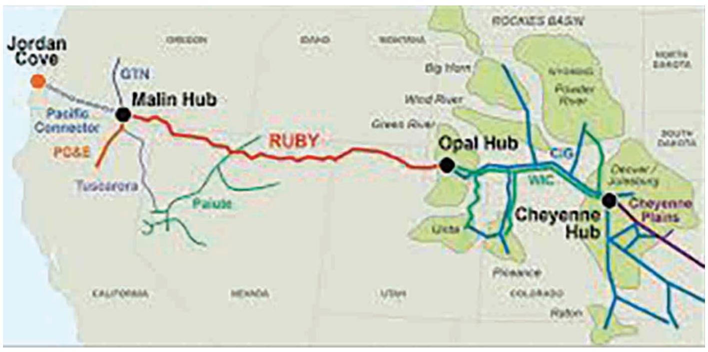
Enbridge files complaint against Michigan's closure of Line 5 pipeline

Enbridge Inc., the Canadian TSO whose gas pipelines connect supply basins and LNG export plants and cities, has filed a federal complaint accusing Michigan Democratic Party Governor Gretchen Whitmer of "acting like an energy regulator" by seeking to cut off the Line 5 pipeline under a small corner of the Great Lakes.

Canadian company Enbridge and the Canadian province of Alberta have condemned the Michigan Governor's actions of issuing the Line 5 pipeline closure order.

Whitmer's office notified Enbridge that it was revoking an easement granted 67 years ago to extend a roughly four-mile section of the pipeline through the Straits of Mackinac. The revocation takes effect in 180 days, when the flow must stop.

Enbridge is a main natural gas supplier to the US Gulf Coast and other areas of the US and is involved in providing feed gas for several LNG ventures, including the Rio Grande export project on the Brownsville Ship Channel in Texas. Vern Yu, the Enbridge Executive Vice President and President, Liquids Pipelines, said it was time for the State of Michigan to "stop playing politics" with the energy needs and anxieties of US and Canadian consumers and businesses. ■



The Ruby Pipeline provides vital feedgas to Jordan Cove LNG

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DoE waives rule for separate long- and short-term LNG permits

Striving to boost spot market flexibility, the US Department of Energy (DoE) has removed the requirement for long-term LNG export authorization holders to seek separate short-term permits to export volumes. The single authorisation is meant to "remove unnecessary regulatory burdens for LNG exporters," said Secretary of Energy Dan Brouillette.

"Those exports bring benefits to our economy, while also helping to reduce global emissions," added Brouillette in reference to US shipments to Asia helping to enable the switch from coal to gas.

The DoE believes that this deregulatory measure would lead to administrative efficiency. It would also remove a duplicative requirement for exports of LNG to have DoE authorization for the short-term market, where the authorization holder already has long-term export authority.

DoE building in Washington, DC

Concurrent with this policy statement, DOE added that it was amending several long-term LNG export orders to add short-term export authority to the long-term orders.

"We are increasingly seeing more sales of LNG on the spot market, and this action by DoE is allowing more flexibility for US LNG exporters," explained Deputy Secretary of Energy Mark W. Menezes. "With this policy, US LNG exporters can let the market - not our regulatory process - determine which LNG cargos will be exported under long-term or short-term agreements on the spot market."

At the start of January 2021, the DoE also issued its fourth set of LNG export authorizations through to 2050. This action followed several LNG export term extensions issued since October 2020 pursuant to its global export policies. ■

NEWS NUDGES

US LNG permit

The US Federal Energy Regulatory Commission said Trans-Foreland Pipeline Co. a subsidiary of Marathon Petroleum Corp, has permission to convert the former small-scale Kenai LNG export plant into an import terminal. The FERC permit gives Trans-Foreland two years to put the proposed facility into service. Trans-Foreland plans to import around four LNG shipments per annum for use in the adjacent Kenai Refinery.

Charter rates firm

Shipping charter rates for LNG carriers in the spot market were firm as Northern Hemisphere winter market demand increased. Rates were quoted at an average of between $158,000 per day and $162,0000 per day West of Suez. Spot rates of $148,000 to 152,000 were heard for the East of Suez charter market for vessels of between 155,000-165,000 cubic metres capacity, according to various brokers. One-year time charters were also little changed for the most modern vessels and were available for around $47,000 per day. ■

DoE extends export permit terms for five more LNG ventures

The US Department of Energy (DoE) has extended the terms of five long-term liquefied natural gas export authorizations through 2050 for plants in Louisiana, Texas, Georgia and Florida. The ruling follows several LNG export term extensions issued since October 2020 pursuant to the government's ongoing energy export policy.

Three senior members of the DoE who have`pushed forward the current Administration's LNG export policy voiced support for American energy shipments overseas as a gesture of support for allies and a s a great financial benefit to the nation's balance of payments on trade.

"The Trump Administration and DoE have delivered on our commitment to ensure that US LNG holds a prominent place in the global energy market," US Secretary of Energy Dan Brouillette said, adding: "The 2050 policy and subsequent extended authorizations lock in the long-term benefits of LNG exports and provide yet another way to support the success of US LNG exporters abroad."

The latest term extensions have been given to the Southern LNG export facility operating in Georgia, the Elba Island plant, as well as Sempra Energy's Cameron facility in Louisiana. The new permits have also been given to the Annova LNG project proposed in Texas and Eagle LNG's two small-scale facilities in Florida, including the Maxville facility currently in operation.

"Just this year, LNG exports from the United States will reduce our trade deficit by over $12 billion and recent export levels have been at all-time highs," said Deputy Secretary of Energy Mark W. Menezes. "The development of US infrastructure to support our LNG exports has provided thousands of jobs and led to billions of dollars in industry investment, the benefits of which will be sustained by this policy."

These issuances extend each project's long-term LNG export authorization to non-free trade agreement (non-FTA) countries through December 31, 2050.

Including the term extension applications granted on December 31, long-term LNG export authorizations with terms through 2050 are now held by 18 LNG export projects, as well as the Costa Azul project in Mexico which can receive US feed gas. ■


View of Southern LNG export facility in Georgia

US LNG: October – December 2020

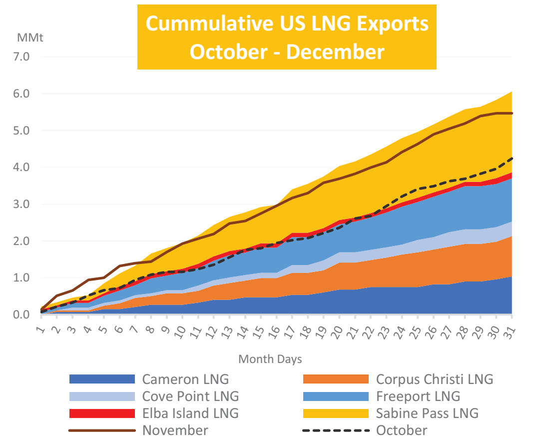
LNG Journal

- October-December exports at 15.76mmt on 31st December
- Exports more than doubled over July-September period
- Total shipments up 35pct over three-month period last year
- Avg. US capacity utilisation at 88pct for report period

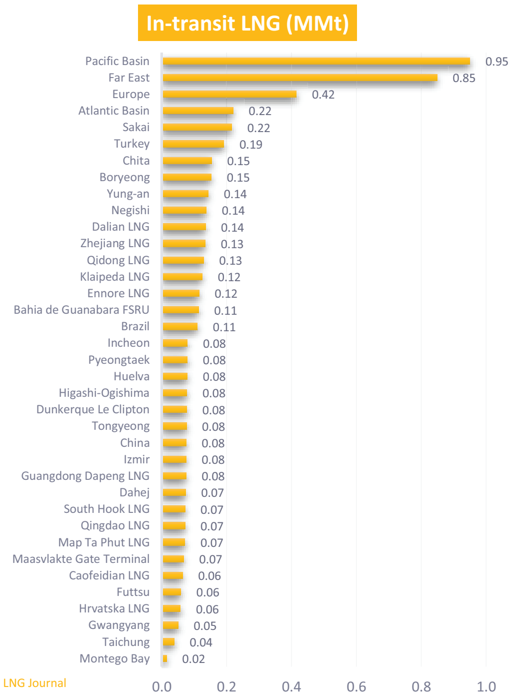
Following a difficult summer, US LNG exports rebounded between October and December. Spurred by robust demand growth in Asia and South America, US LNG exports for the period covering October, November and December stood at 15.76mmt, more than double the 6.95mmt exported between July and September. These winter cargoes had a delivery horizon of 9th February at the time of writing. Average capacity utilisation for the period had thus rebounded from just 54pct for July-September to 88pct for October-December. This also meant total US LNG exports for the period increased considerably above their year-on-year levels, shipping 4.05mmt (35pct) more in October-December 2020 than for the equivalent period in 2019.

The winter recovery of US LNG exports was led by Cameron LNG, which rebounded from profound production difficulties in September and October. The plant was disconnected from its power supply, which was only partially restored when Tropical Storm Beta hit the coast of the US Gulf of Mexico. Overall, US LNG exporters were operating slightly above nameplate capacity in December after they had kept pushing production throughout October and November. Although we therefore do not expect overall US LNG export growth to accelerate much further since it already operated close to capacity in December, we nonetheless see portfolio players maintaining high output in January.

Interestingly, US LNG exporters increasingly opted to ship their cargoes to the Pacific via longer routes through the Suez Canal, South Africa's Cape of Good Hope and Chile's Cape Horn. Although the Panama Canal route remained the most popular option for US LNG to reach the Far East in particular, we noticed a distinct rise in popularity of the route around the Cape of Good Hope and via Suez among US LNG exporters. Transit costs via Suez tend to be lower than their Panama equivalent whilst the route around South Africa does not carry extra transit fees. Whilst there remained a time penalty of roughly a week for avoiding Panama - a significant difference given the recent steep rise in charter rates - many of the vessels are owned or controlled by the portfolio players themselves and the savings in transit fees will have helped to offset several days' worth of charter rates in some cases. Moreover, a significant tonnage build-up off both the east and west coasts of Panama aided by a surge in container demand prior to Christmas may have also worked to make the route less attractive. According to our voyage data based on originally scheduled arrivals, some LNG shippers had to contend with delays of up to four days.



Source: LNG Journal



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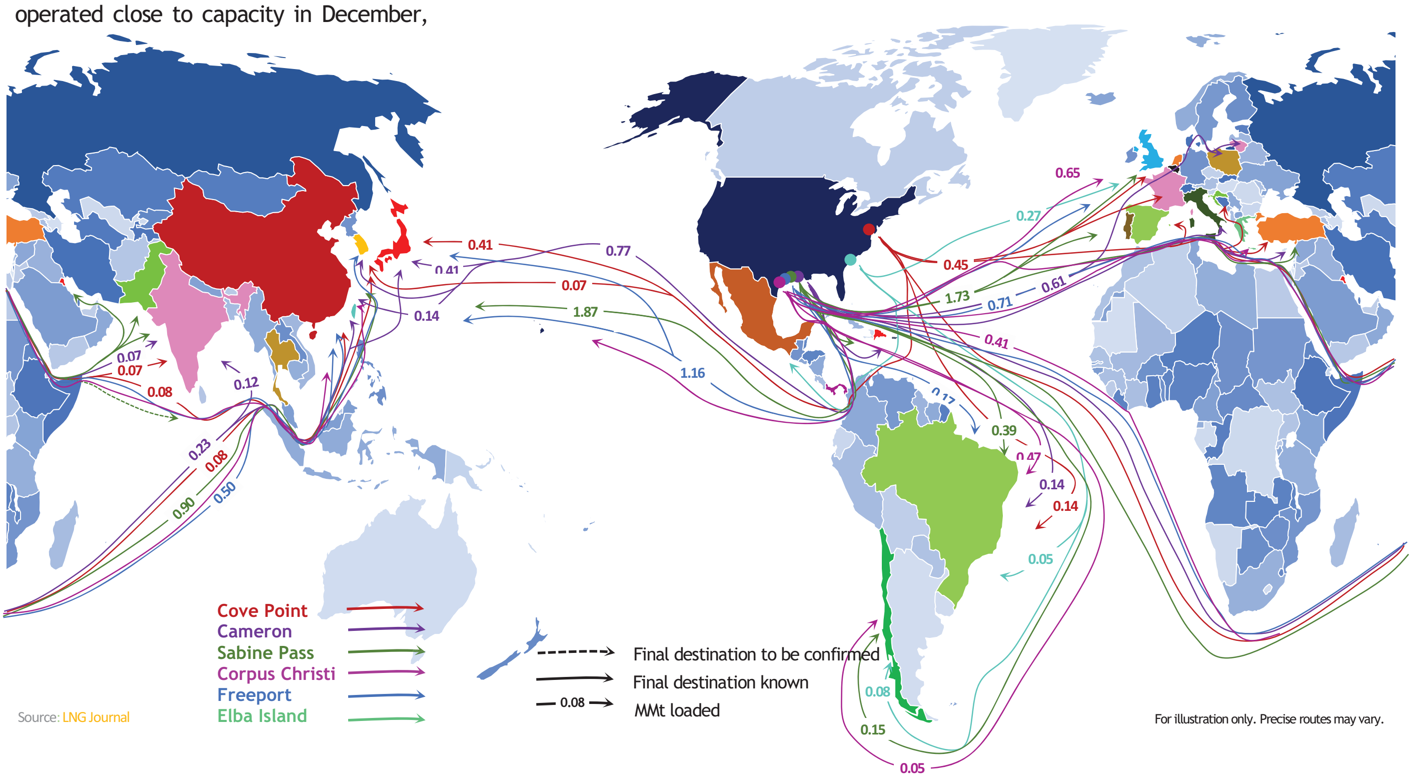


Source: LNG Journal

US LNG Still in Transit

LNG Journal

At the time of writing, 47 cargoes (3.18mmt) shipped since late November remained in transit, with 27 shipments (1.83mmt) still lacking confirmed destinations within the Pacific and Atlantic Basins. We are currently expecting c. 27pct (0.50mmt) of in-transit US LNG to arrive at destinations throughout the Atlantic Basin and Europe. At the same time, with no shipments currently earmarked for the Middle East, the Pacific Basin is expecting the remaining 73pct (2.68mmt) of in-transit LNG, with 1.99mmt currently headed for the Far East. Our LNG Market Tracker indicates there are seven US LNG shipments still to arrive in China, amounting to 0.47mmt. We are anticipating their arrivals by 21st January. U.S. cargoes en route to China thus exceeded those headed for Japan by 27th January by a slight margin of 0.04mmt.

Previous Export Port	Vessel Name	IMO	Destination	Arrival	MMt*
Elba Island LNG	Sestao Knutsen	9338797	Brazil	10/01/2021	0.05
Cove Point LNG	Seri Balqis	9331672	Gwangyang	31/01/2021	0.05
	Energy Glory	9752565	Negishi	19/01/2021	0.07
	Energy Liberty	9736092	Negishi	17/01/2021	0.07
Cameron LNG	Diamond Gas Orchid	9779226	Futtsu	23/01/2021	0.06
	Golar Seal	9624914	Turkey	09/01/2021	0.07
	Marvel Crane	9770438	Higashi-Ogishima	27/01/2021	0.08
	BW Pavilion Aranda	9792606	Dahej	19/01/2021	0.07
	Seri Balhaf	9331660	Qidong LNG	11/01/2021	0.07
	SCF La Perouse	9849887	Sakai	24/01/2021	0.08
Corpus Christi LNG	GasLog Santiago	9600530	Turkey	09/01/2021	0.06
	Oak Spirit	9681699	Far East	17/01/2021	0.07
	Fuji LNG	9275359	Taichung	08/01/2021	0.04
	La Mancha Knutsen	9721724	China	08/01/2021	0.08
	Maran Gas Lindos	9627502	Pacific Basin	17/01/2021	0.07
	GasLog Chelsea	9390185	Qidong LNG	21/01/2021	0.06
	Rias Baixas Knutsen	9825568	Pyeongtaek	04/02/2021	0.08
	Flex Aurora	9857365	Europe	15/01/2021	0.08
Freeport LNG	Golar Tundra	9655808	Pacific Basin	24/01/2021	0.07
	British Listener	9766566	Zhejiang LNG	10/01/2021	0.07
	British Sponsor	9766580	G. Dapeng LNG	18/01/2021	0.08
	Golar Bear	9626039	Far East	16/01/2021	0.06
	Sean Spirit	9781918	Pacific Basin	23/01/2021	0.08
	British Partner	9766530	Caofeidian LNG	09/01/2021	0.06
	Golar Kelvin	9654701	Far East	25/01/2021	0.07
	Maran Gas Andros	9810379	Far East	03/02/2021	0.08
	Golar Celsius	9626027	Turkey	08/01/2021	0.07
	Prism Agility	9810549	Boryeong	20/01/2021	0.07
	Prism Brilliance	9810551	Boryeong	09/01/2021	0.08
	Arctic Discoverer	9276389	Dalian LNG	09/01/2021	0.06
Sabine Pass LNG	Catalunya Spirit	9236420	Europe	10/01/2021	0.04
	GasLog Shanghai	9600528	Pacific Basin	24/01/2021	0.07
	Maran Gas Alexandria	9650054	Far East	27/01/2021	0.07
	Maran Gas Hector	9682605	Far East	09/01/2021	0.07
	Adam LNG	9501186	Yung-an	11/01/2021	0.07
	Arwa Spirit	9339260	Far East	23/01/2021	0.06
	Creole Spirit	9681687	Far East	31/01/2021	0.07
	Flex Rainbow	9709037	Pacific Basin	20/01/2021	0.08
	GasLog Gibraltar	9707510	Chita	16/01/2021	0.08
	Hispania Spirit	9230048	Brazil	11/01/2021	0.06
	Maran Gas Efessos	9627497	Far East	10/01/2021	0.07
	Methane Jane Elizabeth	9307190	Pacific Basin	05/02/2021	0.05
	Pan Europe	9750244	Pacific Basin	31/01/2021	0.08
	SM Eagle	9761827	Tongyeong	28/01/2021	0.08
	WilForce	9627954	Pacific Basin	28/01/2021	0.07
	Galicia Spirit	9247364	Pacific Basin	10/01/2021	0.06
	Bonito LNG	9845788	Atlantic Basin	14/01/2021	0.08
Grand Total	**47**				**3.18**

*Values are based on journey time to date in accordance with draught at departure and in-transit BOR. Eventual journey times will thus affect the final amounts delivered.

Source: LNG Journal

LNG Journal

Monthly US LNG Exports (MMt) as of 31st December

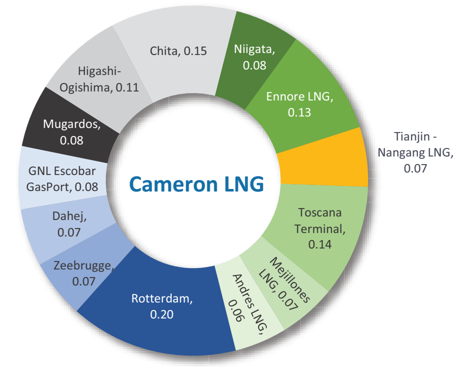
Period between 1st October and 31st December, inclusively

Elba Island LNG

Elba Island LNG exported seven cargoes, amounting to 0.46mmt, between October and December. More than a third went to Chile so that an additional cargo headed for Brazil made South America the plant's most prominent market. Elba Island's capacity utilisation therefore stood at 73pct for the period.

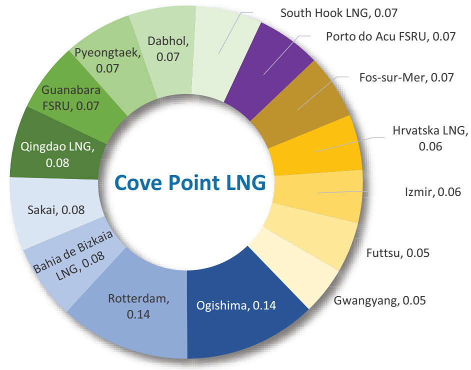
Cameron LNG

Exports from Cameron LNG within the period recovered from a significant decline between July and October, our data shows. Total shipments more than halved from 0.63mmt in July to just 0.30mmt in October as the region struggled with hurricane weather. However, Cameron LNG exported 2.19mmt via 34 shipments over the report period, pegging utilisation at 109pct. In November, the plant even operated at 129pct utilisation, helped by robust Brazilian and Japanese demand. The plant was in the process of loading a cargo aboard the *Golar Ice* on 8th January.



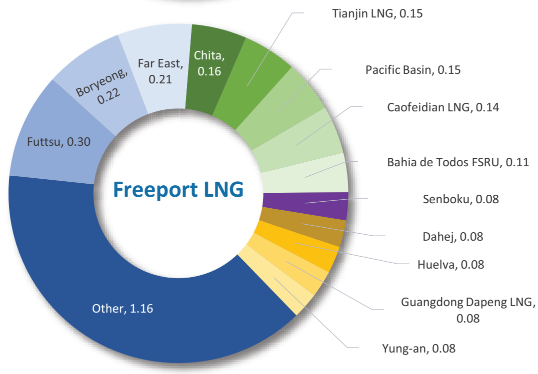
Cove Point LNG

Cove Point LNG saw exports slashed to 0.25mmt in September. Shipments for the period, however, improved markedly from 0.27mmt in October to 0.49mmt in November and 0.39mm in December, pegging utilisation for the period at 80pct. There are currently three Cove Point cargoes in transit – two headed to the Negishi terminal in Japan and one to South Korea. At the time of writing, we were expecting Cove Point's second a cargo lifting in the new year via the *GasLog Salem* on 8th January.



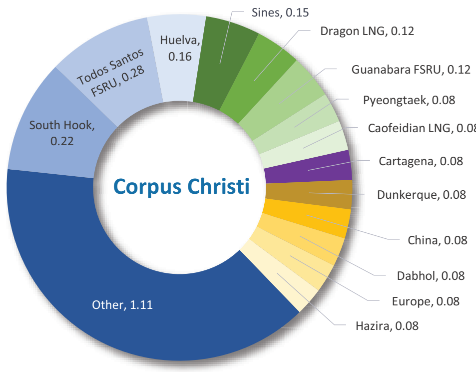
Freeport LNG

Freeport LNG exports have seen an overall steady ascent since September's total of 0.55mt. Shipments in October amounted to 0.82mm and reached 1.17mmt in December, pegging utilisation for the period at 86pct. The plant still had 12 cargoes amounting to 0.84mmt in transit as of 8th January, 0.63mmt (75pct) of which are expected to arrive in China, South Korea and the Far East whilst the remaining 0.21mmt (25pct) are due in Turkey and yet-to-be determined ports in the Paficifc. At the time of writing, the *LNG Juno* and the *GasLog Hong Kong* were waiting in Freeport's anchorage.



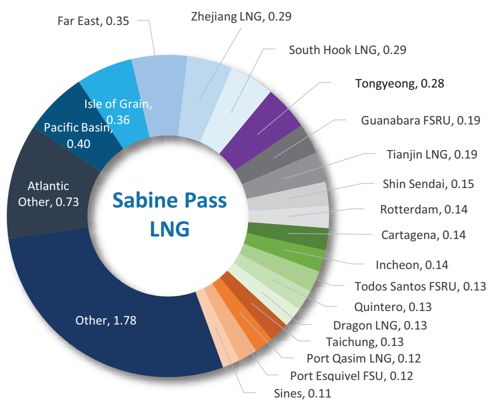
Corpus Christi LNG

In line with U.S. LNG exports overall, Corpus Christi LNG saw shipments increase over the period. Accordingly, the plant shipped 3.38mmt between October and December, pegging utilisation for the period at 84pct. The bulk of the plant's exports was destined for the Atlantic Basin, led by the United Kingdom and Brazil. At the time of writing, the Torben Spirit was in the process of loading the plant's fourth shipment in 2021.



Sabine Pass LNG

Sabine Pass LNG's exports stood at 5.63mmt for the period, pegging capacity utilisation at 109pct. This contrasted with relatively lacklustre utilisation seen over parts of the summer. The plant operated close to or above nameplate capacity throughout the period. Sabine Pass exports were mainly headed to the Far East (39pct), with China taking up the largest share of 0.84mmt (14 pct), closely followed by the United Kingdom with 0.77mmt (13pct). The plant was in the process of loading a cargo aboard the *Golar Snow* on 8th January.



Source: LNG Journal

US LNG Exports - Report Period (MMt)

LNG Journal

To Country	2019 Oct	2019 Nov	2019 Dec	2020 Jan	2020 Feb	2020 Mar	2020 Apr	2020 May	2020 Jun	2020 Jul	2020 Aug	2020 Sep	2020 Oct	2020 Nov	2020 Dec	Grand Total
South Korea	0.91	0.50	0.76	0.84	0.27	0.59	0.50	0.37	0.58	0.20	0.28	0.55	0.27	0.88	0.28	7.90
Japan	0.50	0.36	0.50	0.57	0.43	0.41	0.37	0.27	0.41	0.22	0.46	0.14	0.54	0.65	0.65	6.99
Spain	0.25	0.40	0.26	0.51	0.36	0.45	0.47	0.63	0.18	0.27	0.07	0.28	0.29	0.15	0.21	5.49
United Kingdom	0.46	0.85	0.56	0.69	0.57	0.42	-	-	-	0.06	-	0.06	0.28	0.55	0.61	5.18
China	-	-	-	-	-	0.37	0.43	0.30	-	0.22	0.26	0.14	0.65	0.90	0.64	3.91
India	0.17	0.13	0.14	0.07	-	0.36	0.36	0.21	0.19	0.15	0.22	0.20	0.36	0.22	0.20	3.26
France	0.28	0.47	0.32	0.11	0.41	0.46	0.31	0.06	-	-	-	-	0.19	0.12	0.08	2.94
Turkey	0.07	0.15	0.05	0.70	0.49	0.12	0.36	0.14	-	0.08	-	0.08	-	0.27	0.34	2.85
Brazil	0.06	0.07	-	0.17	0.21	0.14	-	-	-	-	0.07	-	0.43	0.58	0.58	2.47
Netherlands	0.13	0.21	0.34	0.12	0.30	0.28	0.20	0.14	0.13	0.13	-	0.06	0.07	0.15	0.07	2.40
Chile	0.14	0.08	0.14	0.09	0.22	0.08	0.28	0.23	0.07	0.06	0.14	0.08	0.06	0.14	0.13	2.10
Italy	-	0.13	0.26	0.13	0.33	0.21	0.07	0.12	0.27	0.06	0.13	-	-	0.05	-	1.83
Taiwan	0.07	0.07	0.07	0.19	0.14	0.12	-	0.14	0.06	-	-	0.18	0.08	0.13	0.11	1.36
Mexico	0.14	0.06	0.20	0.14	0.07	0.15	-	-	-	-	0.07	0.07	0.15	0.07	-	1.32
Pacific Basin	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.26	1.26
Greece	-	-	0.12	0.21	-	0.19	0.07	-	0.04	0.13	-	0.15	-	0.07	0.14	1.11
Portugal	0.08	-	0.08	0.07	0.11	-	0.22	-	-	-	-	0.16	0.07	0.11	0.08	1.02
Pakistan	0.08	0.07	0.06	0.06	0.07	-	0.07	-	-	-	0.07	0.19	0.19	-	-	0.98
Belgium	-	0.06	0.12	0.11	0.20	0.08	0.06	0.11	-	-	-	-	0.06	0.07	-	0.96
Poland	0.07	0.07	0.13	0.05	0.12	0.07	0.08	0.13	-	-	-	-	0.06	-	0.08	0.87
D. Republic	0.06	0.07	0.02	0.01	-	0.08	0.08	0.06	-	-	-	0.03	0.13	0.07	0.08	0.77
Singapore	0.05	-	0.05	-	-	0.22	-	-	-	0.07	0.06	-	0.06	0.15	-	0.67
Lithuania	-	-	0.07	-	-	-	0.06	0.07	0.06	-	-	0.07	0.11	0.08	0.13	0.65
Thailand	-	-	-	-	-	0.08	0.15	0.22	-	0.07	-	-	-	0.07	-	0.64
Jamaica	-	-	0.02	-	0.05	-	0.13	0.05	-	-	-	0.04	0.12	-	0.05	0.47
Argentina	-	-	-	-	-	-	-	0.15	0.07	0.02	0.13	-	-	-	-	0.38
Kuwait	-	-	-	-	-	-	0.07	-	-	-	0.15	0.07	0.08	-	-	0.37
Israel	-	-	-	-	-	0.06	-	-	0.06	0.05	0.07	0.07	-	-	-	0.30
Bangladesh	-	-	0.07	0.07	-	-	-	0.07	-	0.07	-	-	-	-	-	0.28
UAE	-	-	-	-	-	-	-	-	0.07	0.07	0.07	-	-	-	-	0.27
Atlantic Basin	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.27	0.27
Jordan	-	-	-	-	-	-	-	0.07	-	-	-	0.08	-	-	-	0.22
Panama	-	0.01	-	0.01	0.07	0.01	-	0.06	-	-	-	0.03	-	-	0.03	0.21
Colombia	-	-	-	0.03	0.01	-	-	-	-	-	-	0.06	-	-	-	0.10
Malaysia	-	0.07	-	-	-	-	-	-	-	-	-	-	-	-	-	0.07
Croatia	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.06	0.06
Malta	-	-	-	0.03	-	-	-	-	-	-	-	-	-	-	-	0.03
Grand Total	**3.52**	**3.84**	**4.35**	**4.98**	**4.43**	**4.94**	**4.33**	**3.61**	**2.20**	**1.92**	**2.24**	**2.78**	**4.24**	**5.47**	**6.06**	**61.94**

Source: LNG Journal

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