

LNG Unlimited

LNG JOURNAL PUBLICATION

9 January 2025

US projects ramp up - Russian gas flow shutdown heralds in 2025

Demand for natural gas and US production rose to new heights at the end of last year.

This comes as Europe increasingly sought gas to replace Russian supplies and the US LNG industry expanded its exports to new customers, including Ukraine.

Citing data from LSEG, Reuters reported US production topped 15 bill cu ft three times in the last two weeks of 2024, setting a new record of 15.2 bill cu ft on 31st December.

Threatening market balance was the end of Russia's transmission agreement with Ukraine, which allowed Russian gas to flow through the country to the West. Ukraine refused to renew the five-year agreement with the result that Russia's Gazprom ceased gas flows through the pipeline on 1st January.

While Europe has large stockpiles, it is expected that the region will turn to the US for increased shipments, depending on the weather conditions this winter.

US projects

US export operations have also been gearing up over the past few weeks.

For example, Venture Global reported in the middle of December that the first phase of its second facility, Plaquemines LNG, in Louisiana, had achieved its first production to become the US' eighth LNG export facility (see page 4).

When fully complete, this export facility will become one of the largest with a production capacity of 20 mill tonnes per annum.

The plant loaded its first cargo at the end of December on board Venture Global's new LNGC, 'Venture Bayou', a 174,000 cu m vessel

built by Samsung Heavy Industries. She is the first of nine for the company's new fleet and is currently bound for Germany.

In another first, 'Gaslog Savannah' (155,000 cu m) arrived at Greece's Revithoussa LNG terminal from the US. The around 100 mill cu m LNG cargo was the inaugural US cargo purchased by DTEK, Ukraine's largest private energy company.

Because of war-related restrictions on LNG shipments in the Black Sea, DTEK has used a convoluted method to obtain the gas. It was regasified in Greece and fed into the European network, exchanged through the European Union to reach Ukraine's gas network.

DTEK said that it expected to receive additional US shipments and will look to expand its LNG activities into northern Europe and the Baltic region.

Freeport LNG said, on 31st December, that it had completed its 800th shipment of natural gas. This cargo was bound for Japan's huge energy buyer JERA, which has a large supply agreement and is an investor in the plant. Freeport LNG is planning to add a fourth train to its facility.

Other US companies involved in expansion projects included Cheniere Energy, which announced on 30th December, its first LNG produced by the Corpus Christi Stage 3 liquefaction project (see page 3).

A joint venture between Exxon-Mobil and QatarEnergy is also developing an export facility on the Gulf Coast, which is scheduled to start production in late 2025 or early 2026.

Despite the huge Qatari expansion projects, the US EIA forecast



President-elect Trump is expected to repeal the LNG development pause

continued steady growth for the US sector. It projected capacity will surpass 20 bill cu ft per day by 2026 and 24 bill cu ft by 2028.

Meanwhile, Ukrainian President Zelinsky said on 1st January that he hoped that increased gas supply from the US and other suppliers to Europe would make prices more affordable.

"This (the Russian gas flow shutdown) is going to further tighten the LNG market," Scott Darling, Managing Director of Haitong International Securities said on Bloomberg TV last Thursday. "Supply, particularly for LNG, is tight, and we see more upside risk to spot LNG prices this year and next."

While the Ukraine pipeline shutdown was expected, this move will mean that Europe will have to replace around 5% of its gas imports and the region may have to rely more heavily on storage, which has fallen below the average levels for this time of year.

Prices rose before the cut-off, with Europe's gas benchmark closing 2024 up by more than 50%. ■

UNLIMITED AGENDA

MARKETING

Asia spot rises

2



Qatar future

3



FINANCE

IPO planned

4

State aid

6

Steelhead action

7

ENVIRONMENT

Methane emissions

8

TECHNOLOGY

Woodside contracts

8

Asian spot prices rise

Asian spot LNG prices rose last week to a one-month high, as the expiry of a transit deal for Russian gas through Ukraine caused uncertainty in Europe's gas outlook.

The average LNG price for February delivery into Northeast Asia LNG-AS was \$14.60 per MMBtu, industry sources estimated to newswires.

Ukraine had allowed Russia to continue transporting gas across its territory, despite the war, but Kyiv pulled the plug on renewing a five-year deal that expired on 1st January.

"While this risk was predictable, the European gas balance remains uncertain in the first quarter. A key concern is the relatively high withdrawals from European gas inventories, which are currently 16% lower year-over-year, due to

stronger gas demand," said Siamak Adibi, analyst at consultancy FGE, talking with newswires.

While this loss of Russian gas will not directly impact Northwest Europe's gas balances, more demand from eastern markets, such as Slovakia, could draw additional volumes from the Western supply pool, Adibi added.

"The suspension of the Russian gas flow via Ukraine could result in a net loss for the European market, necessitating higher LNG imports to balance the market in 2025," he said.

Price rise support

Northwest European delivered price gains have outpaced Asia's price rises, supported by the end of the Russia/Ukraine gas transit deal, downward revisions to mini-

mum temperature forecasts and an unplanned outage at Norway's Hammerfest export terminal, said Martin Senior, head of LNG pricing at commodity pricing agency, Argus.

"But there haven't been many Asia to Europe (LNG cargo) diversions, as was seen in mid-November when European delivered prices last rose above Asian delivered prices, as the inter-basin arbitrage has been closed for some weeks, meaning most US Gulf cargoes were already sailing towards Europe instead of Northeast Asia.

"European prices closing above Asian prices have also prompted most west African cargoes to head to Europe instead of Asia - where they had mostly delivered to in 2024," he added.

S&P Global Commodity Insights

assessed its daily Northwest Europe LNG Marker (NWM) price benchmark for cargoes delivered in February on an ex-ship (DES) basis at \$14.785 per MMBtu on 2nd January, a \$0.225 per MMBtu discount to the February gas price at the Dutch TTF hub.

The US arbitrage to Northeast Asia via the Cape of Good Hope for February was closed, due to the TTF rally, signaling that US cargoes are incentivised to deliver to Northwest Europe instead, said Spark Commodities analyst, Qasim Afghan, adding that the US arbitrage to Northeast Asia via the Panama Canal was also closed.

LNG freight rates in the Atlantic rose to \$24,750 per day last Friday, while Pacific rates climbed to \$21,750 per day, Afghan revealed. ■

LNG exports see slowest growth since 2015

Last year, global LNG exports grew at the slowest rate since 2015.

This stunted growth pattern threatened to keep prices high

until new supplies come online.

In 2024, annual LNG shipments were set to rise by 0.4% to around 414 mill tonnes, according to data

compiled by Kpler.

However, delays to US projects and sanctions against Russia's latest facility curbed new supplies

from entering the market.

The LNG market has been finely balanced since Russia's invasion of Ukraine in 2022, which as a result, cut Russian pipeline gas imports into Europe.

A lack of new export suppliers made the market susceptible to price spikes for European and Asian buyers.

In contrast, the

market could be boosted this year by new US projects ramping up production and a Canadian export project coming online.

Just before the end of last year, Venture Global's Plaquemines plant exported its first cargo, while Cheniere's CCL Stage 3 began its first LNG production.

The US was the world's largest LNG exporter in 2024, shipping a record 87 mill tonnes, roughly equal to the previous year, according to Kpler's data.

China remained the largest buyer for a second year running, receiving more than 78 mill tonnes, up by 8.5% year-on-year, however, this was slightly lower than the 2021 total of around 80 mill tonnes. ■



Global LNG exports have slowed

LNG Shipping News

2 Prospect Road
St Albans AL1 2AX
United Kingdom
www.lngjournal.com
Tel: +44 (0)20 7253 2700

Publisher
Stuart Fryer

Editor

Ian Cochran
+44 (0)7748 144265
lancochran74@gmail.com

Ad sales enquiries

Narges Jodeyri
+44 (0) 20 7017 3406
narges@lngjournal.com

Subscriptions

Stephan Venter
Tel: +44 (0) 20 7253 2700
venter@lngjournal.com

Production

Vivian Chee
Tel: +44 (0) 20 8995 5540
chee@thedigitalship.com

No part of this publication may be reproduced or stored in any form by any mechanical, electronic, photocopying, recording or any other means without the prior written consent of the publisher. Whilst the information and articles in LNG Shipping News are published in good faith and every effort is made to check accuracy, readers should verify facts and statements direct with official sources before acting on them as the publisher can accept no responsibility in this respect. Any opinions expressed in this publication should not be construed as those of the publisher."

Which direction will Qatar go?

At the end of last year, it was reported that around 60 mill tonnes of QatarEnergy's LNG supply was still unsold.

Industry sources expected that this was a sign of a strategy to utilise the unsold volumes to dominate the market by agreeing shorter contracts and by utilising the spot market.

QatarEnergy is in the middle of developing its North Field expansion projects, which will result in the country offering huge production capacity from 2026 to the end of the decade.

However, the number of long term contracts signed has been shrinking, even among leading Asian buyers, such as China.

Sources believed that the spot market will become very liquid with the result that prices will fall to unprecedented levels.

Asian sources highlighted the difference in contracting between Middle East exporters, QatarEnergy and ADNOC Gas, by which the latter was able to negotiate more than 80% of its contracts as heads of agreements (HoAs) or sales and purchase (SPA) contracts.

ADNOC allows more flexibility for buyers than its Qatari counterpart. This was illustrated by contracts signed with European interests, such as SEFE and EnBW, whereby the buyers were allowed to receive cargoes in Europe and in Asia.

In addition, US suppliers had found buyers willing to pay a premium for fully flexible free-on-board (FOB) supplies. These have mainly consisted of portfolio players and trading houses.

Large portfolio players have increasingly been able to lower



Qatar - taking a different path

their offer prices for term contracts by asking the buyer to concede contractual flexibility.

However, it was reported that QatarEnergy has not been willing to concede contractual flexibility to sellers, neither has the offer price been reduced to compete with the portfolio companies.

Market participants will have to consider more US final investment decisions (FIDs) taken, the large Qatari expansion projects and the price sensitive growth markets of Southeast and South Asia.

Based on contracts announced through September, 2024, QatarEnergy will have roughly 61 mill tonnes per annum of unsold LNG across its projects when the North West Field is expected to reach commercial startup, S&P Global Commodity Insights said in its October report.

Facing headwinds

S&P added that Qatar may be facing headwinds in signing contracts with limited or no destination flexibility amid the risk of a much softer LNG market by the end of this decade and large duration contracts, or it could be intentional to boost its trading portfolio.

QatarEnergy currently produces 77 mill tonnes per annum of LNG,

which is expected to climb to 152 mill tonnes by 2030, given the expansion of the North Field East, North Field West and North Field South projects, plus the 10 mill tonnes from the US Golden Pass export facility, in which QatarEnergy has a stake.

According to Commodity Insights, up to the middle of December last year, Qatar exported 75 mill tonnes of LNG, with around 10-11% being negotiated on the spot market, a percentage that could rise in the future.

One of the strategies could be to allow QatarEnergy Trading, its wholly-owned subsidiary, to take origination positions in the global market, which could then be back filled at the prevailing prices at a later date.

The trading arm's recent deal with Indian buyer GAIL could be a sign of this strategy, as it offered the best price level for GAIL's five year Henry Hub-linked purchase tender, which was described as unusual for Qatar.

A breakdown of the rigid contract based market structures were said to be key to developing gas-on-gas competition and the emergence of a European liquid gas market, which could give QatarEnergy a

First LNG achieved at Corpus Christi Stage 3

The first LNG was produced from Cheniere Energy's first train of the Corpus Christi Stage 3 liquefaction project (CCL Stage 3) during the last week of 2024.

Cheniere said that the commissioning process was continuing, and Train 1's substantial completion should be achieved at the end of the first quarter of 2025, over six months ahead of its guaranteed completion date.

Upon its substantial completion, constructor Bechtel Energy will transfer care, custody and control of the completed train to Cheniere.

Full notice to proceed on CCL Stage 3 was issued to Bechtel by Cheniere in June, 2022.

The project involves the construction of seven mid-scale trains, with an expected total LNG production capacity of over 10 mill tonnes per annum.

As of 30th November, 2024, CCL Stage 3's overall project completion was at 75.9%, which reflected engineering at 96.8% complete, procurement 97.2% complete, sub-contract work 87.7% complete and construction at 39.2%.

Upon the substantial completion of the project's seven trains, the expected total production capacity will be over 25 mill tonnes per annum of LNG. ■

similar impact on the LNG market.

The current LNG market was described as too liquid to give any definitive answers as to Qatar's strategy. ■

NEWS BRIEFS

Cooper to take over the reins at LNG Canada

Chris Cooper, currently LNG Canada's Senior Vice President for Phase 1 Pipeline and Expansion is to succeed Jason Klein as President & CEO of the company, effective 1st April, this year.

Since joining Shell in 1998, Cooper has gained extensive expertise from his leadership roles in upstream, downstream and LNG businesses worldwide, spanning complex challenges in projects, assets, commercial and stakeholder relationship areas.

He was seconded to LNG Canada from Shell in 2021, to lead the reset

and completion of the Coastal GasLink pipeline in close co-operation with TC Energy. Simultaneously, he led LNG Canada's responsibilities to advance Cedar LNG's final investment decision (FID) in 2024, while also directing LNG Canada's Phase 2 development.

Prior to becoming LNG Canada's Senior Vice President, Phase 1

Pipeline & Expansions, Cooper was the Venture Director for Oman Gas and Development Director for Shell's Nigeria LNG Train 7, where he successfully led the development of investment grade business solutions.

Klein will continue to lead LNG Canada as President & CEO until April. After that, he will return to Shell's Houston operation. ■

Mozambique needs stability to advance projects - AEC

With plans currently underway to restart construction of the delayed \$20 billion Mozambique LNG project, which has the potential to produce 13.1 million tonnes of LNG for domestic use per year, there has never been a more important time to prioritise peace and stability in the country, the African Energy Chamber (AEC) said in a statement.

Following the country's 2024 general election result, protests shook the country, leading to turmoil and instability.

Serving as the voice of the African energy sector and a strong advocate for the prosperity of Mozambique, the AEC said it fully supported the country's government, and called for peace, stability and sustainable development, as Mozambique enters its new era of energy growth.

Since the discovery of significant natural gas deposits off Mozambique's northern coast in 2010, expectations for the country's economic prosperity skyrocketed. A previous

IMF report forecast \$500 billion in total revenue by 2045 and an average real GDP growth rate of 24% from LNG exports between 2021 and next year.

Integrated projects

Energy majors TotalEnergies, ExxonMobil and Eni are developing integrated LNG projects, while new upstream companies enter the market and gas-to-power developments approach completion.

Projects, such as Coral Sul LNG, the Rovuma LNG facility and the Temane gas-to-power plant, have

the potential to draw in billions of dollars in investment and revenue, while providing stable energy to upwards of 2 million families by 2030.

Mozambique represents one of the most dynamic gas markets on the African continent, in which its vast offshore gas reserves could make it one of the top 10 producers globally and responsible for up to 20% of Africa's production by 2040, the AEC said.

Geopolitically, these industrialisation efforts have the potential to benefit the wider southern African region and can transform the country into an energy hub for neighbouring countries, including Zimbabwe, Tanzania, Zambia, Malawi, Eswatini and South Africa.

In addition, a 2,700 km coastline on the Indian Ocean makes the country a gateway for vessel access, allowing Mozambique to specialise in efficient, global energy production while diversifying access to low-priced, high-quality goods from markets in Asia, India, Europe and America.

For Mozambique to realise its vast potential however, it is critical that the country remains firmly committed to political stability and sustainable development, the AEC added.

A peaceful and stable environment is the foundation upon which the international community can confidently build long-term partnerships, ensuring that the immense opportunities presented by the development of its natural resources and translate into tangible benefits for all.

"Peace and stability are essential for Mozambique to unlock its vast economic potential.

"As the country emerges as a global energy hub, the international community's confidence hinges on a secure, unified nation. A commitment to peace will not only ensure the success of multi-billion-dollar energy projects but also secure long-term prosperity, driving sustainable growth for Mozambique and the entire southern African region.

"To do this, the government must find common ground and reach terms that translate to long-term beneficiation for the entire population of the country," said AEC Executive Chairman, NJ Ayuk.

Mozambique stands at a crossroads; one path leads to further instability, while the other has the potential to transition the country into a trusted partner in the global energy community, the AEC stressed. ■



African Energy Chamber head, NJ Ayuk

Venture Global files for IPO

US LNG producer, Venture Global, has filed for what could be one of the largest initial public offerings (IPO) globally this year.

The LNG developer plans to list its Class A common shares under the symbol 'VG' on NYSE, a company filing showed.

In November, Reuters reported that the company was planning to raise around \$3 billion from an IPO in New York.

Venture Global plans to use part of the proceeds for general business purposes, including funding its operations.

After the IPO, the company's founders and co-chairmen, Robert

Pender and Michael Sabel, will continue to hold more than 50% of voting power through their entity, Venture Global Partners II, the company said. Sabel is also the company's CEO.

Goldman Sachs, JP Morgan, BofA Securities, ING, RBC Capital Markets, Scotiabank and Mizuho are among the IPO's underwriters, according to the filing.

Venture Global has two operating plants in Louisiana, with its second facility at Plaquemines achieving its first LNG production in December last year.

Towards the end of last month, Venture Global's LNGC 'Venture

Bayou' left Plaquemines for Germany, lifting the first LNG cargo produced at the facility, the company said.

'Venture Bayou', the first of the company's fleet of nine new LNGCs, is shipping the cargo for German utility company EnBW.

Venture Global has now sent more than 60 LNG cargoes to Germany since 2022.

According to ship tracking data from financial firm LSEG, the vessel is expected to discharge at Brunsbüttel.

Like Venture Global's Calcasieu Pass project, Plaquemines has exported its first cargo well

ahead of the US Department of Energy's (DoE) requirement to commence exports within seven years from issuance of the Non-FTA export authorisation, the company claimed.

"In just five years, Venture Global has built, produced and launched exports from two large-scale LNG projects, which has never been done before in the history of the industry," Sabel said.

Plaquemines will produce and export LNG while construction and commissioning continues for the remainder of the project's 36 trains and associated facilities. ■



NEXUS OF CLEAN™

"Chart's vision is to be the global leader in the design, engineering and manufacturing of cryogenic process technologies and equipment for the Nexus of Clean™ — **clean power, clean water, clean food and clean industrials**, regardless of molecule."

A handwritten signature in black ink, likely belonging to Jill Evanko.

JILL EVANKO / CEO / CHART INDUSTRIES

CLEAN CLEAN CLEAN CLEAN

 CHART DELIVERS CLEAN SOLUTIONS FOR



Power



Water



Food



Industrials



Learn more at chartindustries.com

Gas starts to flow from GTA Phase 1

bp has begun to flow gas from the Greater Tortue Ahmeyim (GTA) Phase 1 LNG project wells to an FPSO for the next stage of commissioning.

GTA, located offshore Mauritania and Senegal, is one of the deepest offshore developments in Africa, with gas resources in water depths of up to 2,850 m, the energy giant said.

Once fully commissioned, Phase 1 is expected to produce around 2.3 mill tonnes of LNG per year. In 2021, it was declared “a project of strategic national importance” by both of the governments involved.

The gas flow marked an important milestone towards realising the potential of Mauritania’s and Senegal’s gas resources, with the possibility for the countries to become an important LNG production hub, bp said.

“This is a fantastic landmark for this important mega project. First gas flow is a material example of supporting the global energy demands of today and reiterates our commitment to help Mauritania and Senegal develop their natural resources,” said Gordon Birrell, bp’s Executive Vice President Production & Operations.

“Africa’s significance in the global energy system is growing, and these nations now have enhanced roles to play. Congratulations to the project and pro-

duction teams for delivering this project and for always keeping safe operations at the heart of what they do. Thank you to the entire GTA team, our partners and host governments for this tremendous achievement,” he added

FPSO and FLNG operation

Gas was fed to the GTA FPSO about 40 km offshore, on which water, condensate and impurities will be removed.

The gas will then be transferred via pipeline to an FLNG located 10 km offshore, where it will be cryogenically cooled, liquefied and stored before being loaded onto LNGCs for export.

Some of the gas will be allo-

cated to help meet growing energy demand in the two host countries.

“With this milestone, Mauritania and Senegal take a major step towards an exciting new chapter as gas-exporting nations. I am proud of the relationships we continue to strengthen in both countries. Without the resilience and dedication of the bp team, as well as our partners, host governments and of course the people of Mauritania and Senegal, none of this would have been possible,” said Dave Campbell, bp’s Senior Vice President, Mauritania and Senegal.

GTA’s construction has generated more than 3,000 local jobs, and the project has involved around 300 Mauritanian and Senegalese companies.

bp and its partners have also invested in local workforce development - including a four-year apprentice training programme - and started a multi-million dollar social investment plan that aims to enhance local quality of life and create long-term opportunities for local development.

The FPSO, which arrived offshore Mauritania and Senegal in the second quarter of last year, was designed to process over 500 mill standard cu ft of gas per day, while the FLNG ‘Gimi’ is owned and operated by Golar LNG and is under a lease agreement.

bp is GTA’s operator with a 56% working interest, alongside partners, Kosmos Energy (27%), PETROSEN (10%) and SMH (7%). ■



Gas is flowing into GTA's FPSO

EC allows German FSRU terminals' state aid

On 20th December, the European Commission (EC) gave permission for German subsidies worth €4.06 billion for the operation of four floating LNG import terminals by state-owned Deutsche Energy Terminal (DET).

The FSRUs were chartered in 2022 at what was deemed at the time to be a high charter rate paid to secure their employment.

The approved state aid “significantly contributes to ensuring continuity of gas supply to Germany and neighbouring countries follow-

ing the end of Russian pipeline gas imports,” said EC Vice President, Teresa Ribera.

This grant contributes to reducing the dependency on Russian fossil fuels and enables the diversification of energy supplies, she added.

The four FSRUs are a temporary solution until the construction of onshore LNG terminals is completed.

The subsidies will cover losses incurred as the terminals were chartered at the height of the EU

energy crisis, as a result of Russia cutting fuel exports to the bloc in retaliation for its support of Ukraine.

DET agreed to sublet the floating terminals if the construction of the permanent replacements was completed before the charter contracts expire, the commission said.

On 23rd December, DET marketed new capacities for LNG regasification for one of its two terminals at Wilhelmshaven and at Brunsbüttel.

DET has since reported that all the capacity volumes were sold and they were valid for January, February and March, 2025.

This was the first of two steps in the current marketing process. DET initially offered three slots per terminal for short-term capacities on the PRISMA platform.

In addition, it will also offer further capacity for 2025 and beyond to the international market via PRISMA in late January/early February, 2025, at a date yet to be confirmed. ■

Golar acquires full ownership of FLNG

Golar LNG Limited has acquired Seatrium's and Black & Veatch's minority ownership interests in the FLNG 'Hilli'.

This comprises all of the third-party interests in the unit, including a total of 5.45% common units, 10.9% Series A shares and 10.9% Series B shares.

It is equivalent to around 8% of the full FLNG capacity, Golar said.

The total acquisitions price is \$90.2 mill, of which \$59.9 mill is in equity and \$30.3 mill is a pro-rata share in the existing FLNG 'Hilli' debt facility.

The increased ownership's full economic interest in the unit became effective on 1st January, 2025.

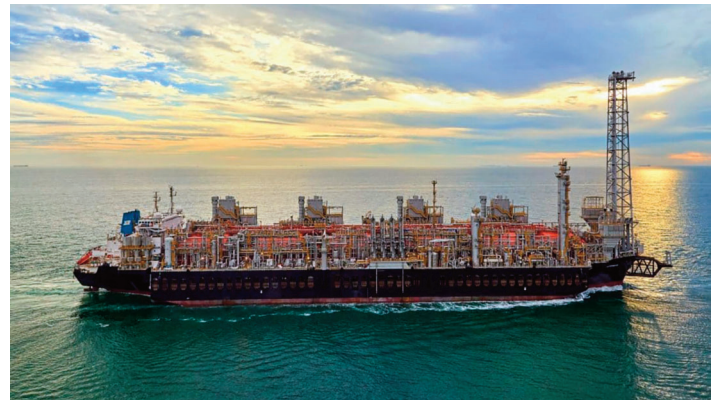
FLNG 'Hilli' is currently contracted to Perenco in Cameroon, until its expiry in July, 2026. The

unit is then planned to reposition to Argentina to start a 20-year contract with Southern Energy, a consortium of Argentine gas producers.

However, this contract still remains subject to defined conditions precedent, including an export license, environmental assessment and a final investment decision (FID) taken by Southern Energy, Golar explained.

Since her contract start-up in 2018, the FLNG has delivered 124 LNG cargoes and offloaded more than 8.5 mill tonnes of LNG in Cameroon.

In addition, Seatrium and Golar have agreed to resolve other remaining issues, resulting in a \$7 mill payment by Golar to Seatrium in relation to a 'Hilli' Train 3 utilisation bonus and set-



Golar has purchased 'Hilli'

tlement of historical work related to former Golar owned LNGC, 'Golar Gandria'.

Golar CEO Karl-Fredrik Staubo commented: "Golar is pleased to take full ownership of FLNG 'Hilli'. The increased ownership will give immediate cash flow accretion and is expected to add

approximately \$0.5 bill of adjusted EBITDA backlog.

"We would like to thank our long-term partners Seatrium and Black & Veatch as co-investors and we look forward to continue to work with both organisations in our ongoing and future FLNG growth ambitions," he said. ■

Steelhead takes action against LNG developers

Vancouver (BC) LNG developer, Steelhead LNG, has filed legal proceedings against Cedar LNG, Pembina Pipeline Corp and ARC Resources in British Columbia regarding the Cedar LNG project.

In the claim, Steelhead alleged that each of the defendants willfully and improperly exploited information supplied by the company to ARC Resources relating to the development of LNG facilities in British Columbia for the benefit of Cedar LNG.

The lawsuit aims to suspend ARC Resources' participation

in the Cedar LNG project, secure damages from the defendants for the unauthorised use and exploitation of Steelhead LNG's information, and obtain an injunction to prevent further wrongful acts.

"It is evident to Steelhead that, without relying on ARC Resources' capacity commitment — enabled by what Steelhead believes to be a pattern of willful and wrongful conduct — Cedar LNG and Pembina would not have been able to secure the substantial financial commitments neces-

sary to reach a positive final investment decision (FID)," Victor Ojeda, Steelhead LNG President alleged.

"While Steelhead remains open to pursuing an amicable resolution, ARC, Pembina, and Cedar have shown little interest in doing so. As a result, Steelhead has no choice but to seek judicial intervention," he explained.

Marty Proctor, the former CEO of Seven Generations Energy and a current director of ARC Resources, was also named as a defendant in the proceedings.

Steelhead LNG said that it holds patents regarding its LNG export facility solution in Canada, US, South Korea, Australia, and Mexico. The company was also recently issued with three new patents in the US, protecting expanded versions of its near shore LNG facility design.

In a separate case, Steelhead LNG is continuing its patent infringement litigation in South Korea against Cedar LNG and Samsung Heavy Industries in relation to the company's South Korea patent. ■

NEWS BRIEFS

Spain's 2024 energy demand rises - natural gas consumption falls

Conventional Spanish energy demand in private households, businesses and industry rose to 237 TWh last year, according to a report from Enagas.

The increase was largely due to a 4.2% rise in industrial consumption, which reached 176.7 TWh.

In 2024, total natural gas con-

sumption amounted to 311.7 TWh, a drop of 4.2%, compared to the previous year, which was due to lower gas demand for power generation. Specifically, gas demand for electricity generation stood at 74.7 TWh, a 22% decrease.

Spain contributed to the European security of supply by supplying a total of 34.5 TWh of natural gas, both through interconnections and LNG shipments.

The ship loading operations complied with the European

Union's 14th package of sanctions against Russia for the invasion of Ukraine.

Spain was the first EU country to define the detailed rules and procedures for the monitoring, control and authorisation of ship loadings carried out in the Spanish gas system in order to ensure that the LNG did not originate in Russia, Enagas claimed.

In 2024, the Spanish gas system received gas from 14 different production areas, contributing

to a broad diversification of supply and positioning Spain as a strategic entry point for LNG to Europe.

Spanish terminals carried out more than twice as many LNG bunker loadings in 2024 (3.8 TWh) than in 2023 (1.5 TWh), thus contributing to the decarbonisation of the maritime sector.

Natural gas levels in underground storage facilities ended the year above 80% - after reaching 100% full in August. ■

US addresses EU methane emissions' regulations

Late last year, US officials strengthened their resolve to ensure LNG shipments to Europe meet current US methane regulations and also automatically comply with Europe's new standards for gas imports.

President Joe Biden's administration sent a second letter to Ditte Juul Jørgensen, EU Director-General for Energy on 17th December, in an attempt to speed up support for its case that US Environmental Protection Agency (EPA) rules should be deemed "equivalent" to the EU regulations, whose emission reporting requirements began this year.

In May last year, the EU approved a law to impose methane emissions limits on Europe's oil and gas imports from 2030, ensuring international suppliers to

cut leaks, or methane slip.

Linking US and EU methane standards would safeguard the US' growing LNG trade with Europe, while also cementing Biden's strict rules on methane, even if they are eventually repealed by President-elect Donald Trump's incoming administration.

"The letter is meant to emphasise in detail the full suite of substantive emissions standards, their robust implementation and compliance, and the reporting requirements' role in ensuring transparency and accountability," EPA Assistant Administrator for air and radiation, Joe Goffman, told Reuters.

Goffman co-signed the latest letter with Brad Crabtree, assistant secretary at the US Energy Department's Office of Fossil Energy and Carbon Management. The

first letter had been sent to the EU at the end of October, just days before the US election.

The DoE had paused permits for new LNG exports at the beginning of last year and said last month that it had found that rising LNG exports risk dramatically raising greenhouse gas emissions and could also trigger price hikes for US energy consumers.

Rules finalised

The EPA has finalised rules to crack down on methane releases, the main component in natural gas and LNG, from existing and new oil and gas facilities, and has set a fee to target large methane leaks from energy infrastructure.

In its latest letter to the EU, the officials highlighted the emissions reductions potential of the

new regulations.

EPA methane standards would reduce 58 mill tonnes of methane emissions from 2024 to 2038, while the Waste Emissions Charge rule would result in cumulative 34 mill tonnes CO₂-equivalent reductions through 2035, the letter claimed.

The EU has not yet designated the exact methane limits, or determined how another country's domestic methane regulations could be considered "equivalent" to its own.

Trump, a climate-change skeptic and a big supporter of fossil fuel development, has promised to immediately end the moratorium on new LNG export permits when he returns to the White House on 20th January and has vowed to roll back most of Biden's climate-focused rules. ■

Baker Hughes and Chart win Woodside contracts

US engineering company, Baker Hughes has won an order from Bechtel Energy to supply gas equipment for two liquefaction plants with a total capacity of around 11 mill tonnes per annum for Phase 1 of Woodside's Louisiana LNG development project, formerly Diftwood.

This order marks a significant

milestone as Woodside targets final investment decision (FID) readiness from the first quarter of 2025, Baker Hughes said.

The contract includes the delivery of eight main refrigeration compressors driven by LM6000PF+ gas turbines and eight expander-compressors.

Baker Hughes had previously

been chosen to supply Woodside with electric-powered integrated compressor line (ICL) packages and other turbo-machinery equipment for the associated pipeline to serve the LNG export terminal.

In addition, Chart Industries received the order from Bechtel to supply integrated pre-cooled

single mixed refrigerant (IPSMR®) liquefaction technology and cold boxes for the Louisiana LNG project.

Under the the contract terms, Chart will provide two LNG plants comprising 16 cold boxes. Each LNG plant includes four heavies removal cold boxes and four LNG liquefaction cold boxes. ■

NEWS BRIEFS

Swan Energy to develop FSRU terminal

Indian conglomerate, Swan Energy, has announced plans to develop an FSRU terminal for its LNG project at Jafrabad, Gujarat.

The company disclosed in a regulatory filing that it had signed a heads of agreement (HoA) with Singapore-based AG&P Terminals and Logistics to establish joint ventures for operating the Jafrabad terminal and supplying LNG.

A new joint venture LNG supply company will be formed with Swan holding a 51% stake and AG&P LNG the remaining 49%.

Another joint venture, dedi-

cated to providing the FSRU and an FSU for the terminal, will see AG&P LNG holding a 51% equity share, with Swan owning 49%.

AG&P will also support the LNG's regasification and may opt for equity participation in Swan Energy's LNG terminal.

Swan said in the filing that the agreements with AG&P are subject to due diligence, with the final terms to be determined after the process.

Last year, Swan announced that it intended to sell a 51% stake in its 5 mill tonnes per annum FSRU, 'Vasant One', to Turkey's state-owned gas company Botas for \$399 mill. The remaining 49% is held by the Indian Farmers

Fertiliser Cooperative (IFFCO).

'Vasant One' was initially intended for the Jafrabad terminal but faced delays, due to the COVID-19 pandemic and a subsequent typhoon.

The vessel was later chartered to Botas under a one-year bareboat deal at a reported \$250,000 per day.

DTEK to ramp up LNG trading arm

DTEK, Ukraine's largest private energy company, is planning to bring two to three LNG cargoes per month to Europe.

Its recently formed trading arm, D Trading bought its first LNG cargo for Ukraine from the

US at the end of last year for delivery into the Revithoussa import terminal in Greece.

It will gradually increase deliveries, primarily targeting US supplies, according to CEO, Dmytro Sakharuk, talking with S&P Global Commodity Insights.

To avoid high transportation costs, D Trading will use terminals in Europe to bring in LNG and sell it to interests in Greece, Bulgaria or Hungary. The company will then use swaps to physically inject gas into Ukraine from the European gas system, he said.

D Trading has hired James O'Brien to lead its LNG trading arm and is looking to appoint more staff. ■