**CONTRACTS**

Cheniere Grows European Customer Base, Offtake for Sabine Pass LNG with BASF

Cheniere Energy Inc. has inked a sales and purchase agreement (SPA) with chemical giant BASF SE as it continues commercializing the next proposed expansion of the Sabine Pass LNG terminal.

BASF agreed to buy 0.8 million metric tons/year (mmty) for at least 17 years on a free-on-board basis, plus a fixed liquefaction fee. Initial deliveries are to start in mid-2026 and ...cont' pg. 4
U.S. LNG Export Tracker 22-Aug-2023

**Daily Summary (Volumes Listed in Dekatherms)**
- **Total Deliveries to U.S. LNG Export Facilities:** 12,012,921
- **Previous Day:** 11,653,581
- **Change:** 359,340

**Corpus Christi, TX**
- Deliveries: 2,249,940
- Op Cap: 2,750,000
- Cap Util: 82%

**Sabine Pass, LA**
- Creole Trail: 1,318,600
- KM PL: 1,050,310
- NGPL: 451,654
- Transco: 898,828
- TOTAL: 3,760,392
- Op Cap: 5,700,000
- Cap Util: 66%

**Cove Point, MD**
- Deliveries: 775,692
- Op Cap: 900,000
- Cap Util: 86%

**Freeport, TX**
- Gulf South: 1,410,280
- TETCO: 526,415
- KM Texas/Texas: N/A
- TOTAL: 1,936,696
- Op Cap: 2,628,405
- Cap Util: 74%

**Elba Island, GA**
- Deliveries: 289,448
- Op Cap: 356,066
- Cap Util: 73%

**Cameron, LA**
- CIP: 1,149,690
- Columbia Gulf: 620,104
- TOTAL: 1,769,794
- Op Cap: 2,369,000
- Cap Util: 75%

**Calcasieu Pass, LA**
- Deliveries: 1,231,860
- Op Cap: 2,125,000
- Cap Util: 58%

**Note:** Figures are NGI's estimates of gas delivered to each respective LNG liquefaction facility, listed in dekatherms, and based on best available cycle as of the morning of each listed gas day.

**Source:** Pipeline EBBs, NGI calculations

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**NGI’s Daily Henry Hub Spot Index vs. Prompt (CME) Futures Contract 22-Aug-2023**

[Graph showing daily price difference between spot and futures contracts]

**Source:** NGI’s Daily Gas Price Index, CSI, NGI calculations
...from CONTRACTS - Cheniere Grows European Customer Base, pg. 1

This SPA demonstrates the critical role U.S. natural gas plays in providing long-term secure, sustainable and affordable energy for Europe,” COO Anatol Feygin said. “With this agreement, we are supporting the objectives of one of Europe’s key industrial end-use consumers to ensure stability of its supply chain.”

In February, Cheniere pre-filed plans with... cont' pg. 6
Estimated Sabine Pass / Asia 12-Month Forward LNG Arbitrage Curves 22-Aug-2023

<table>
<thead>
<tr>
<th>Month</th>
<th>Futures</th>
<th>Variable Cost Only Arbitrage Curve</th>
<th>Total Cost Arbitrage Curve</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oct-23</td>
<td>$3,050</td>
<td>$0.821</td>
<td></td>
</tr>
<tr>
<td>Nov-23</td>
<td>$3,572</td>
<td>$2.813</td>
<td></td>
</tr>
<tr>
<td>Dec-23</td>
<td>$4,100</td>
<td>$3.590</td>
<td></td>
</tr>
<tr>
<td>Jan-24</td>
<td>$4,438</td>
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<tr>
<td>Feb-24</td>
<td>$4,352</td>
<td>$4.718</td>
<td></td>
</tr>
<tr>
<td>Mar-24</td>
<td>$4,000</td>
<td>$5.050</td>
<td></td>
</tr>
<tr>
<td>Apr-24</td>
<td>$3,620</td>
<td>$5.940</td>
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<tr>
<td>May-24</td>
<td>$3,610</td>
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<tr>
<td>Jun-24</td>
<td>$3,725</td>
<td>$6.150</td>
<td></td>
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<tr>
<td>Jul-24</td>
<td>$3,842</td>
<td>$7.940</td>
<td></td>
</tr>
<tr>
<td>Aug-24</td>
<td>$3,887</td>
<td>$8.940</td>
<td></td>
</tr>
<tr>
<td>Sep-24</td>
<td>$3,808</td>
<td>$9.940</td>
<td></td>
</tr>
</tbody>
</table>

Note: Assumes title changes hands at sea, some regas fees. Negative GOM/Asia spreads may not increase the risk of GOM/LNG shut-ins as much as those between GOM and Europe, since Europe has much more storage capacity than Asia. As such, Europe often serves as the market of "last resort." Variable costs assume vessels have been chartered, and include fuel, boiloff, Panama Canal and port fees only. Total costs include variable expenses and fixed vessel chartering fees.

Source: NGI calculations, CSF Energy

Asia LNG Parity Prices 22-Aug-2023

| Current Spot Month Japan/Korea Futures Contract Price (Oct): | $14.300 |
| Current Spot Month Brent Crude Oil Futures Price (Oct): | $84.03 |
| Current Spot Month Japan Coal Price (Aug): | $7.37 |
| Implied Current Japan/Korea Slope to Brent: | 17.0% |

<table>
<thead>
<tr>
<th>Crude Mo</th>
<th>3 Mo Avg JCC</th>
<th>Brent</th>
<th>3 Mo Avg JCC</th>
<th>Brent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oct-23</td>
<td>S85.14</td>
<td>S84.03</td>
<td>14.84</td>
<td>14.45</td>
</tr>
</tbody>
</table>

Note: Oil-linked parity figures tend to serve as a cap on Asian LNG market prices, while coal prices can help act as a floor.

Source: NGI calculations, ICE, CSI, METI

Europe & Asia Weather Data 22-Aug-2023

Trailing 365 Day Mean Temperatures - Northwest Europe

<table>
<thead>
<tr>
<th>Month</th>
<th>Daily Mean Temp</th>
<th>Normal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jun-23</td>
<td>68°F</td>
<td>56°F</td>
</tr>
<tr>
<td>Jul-23</td>
<td>70°F</td>
<td>56°F</td>
</tr>
<tr>
<td>Aug-23</td>
<td>72°F</td>
<td>56°F</td>
</tr>
</tbody>
</table>

First name: NGI calculations, Bloomberg
FERC to add up to 20 million mmty to its southwestern Louisiana liquefied natural gas facility. The Sabine Pass expansion would include three large-scale trains with the capacity to produce 6.5 mmty.

In a letter to the Federal Energy Regulatory Commission earlier this month, Cheniere wrote that it expects to file a full application as soon as next March. Construction could begin by the end of 2025, with the three additional trains in service by 2032.

Cheniere became the largest supplier of cargoes to the European Union (EU) last year, sending 24 million...
tons (Mt) to the bloc from Sabine Pass and the Corpus Christi LNG terminal in 2022, according to data from Kpler. Sabine Pass surpassed QatarEnergy’s Ras Laffen facility last year as the largest single supplier to the EU, growing from 5.4 Mt in 2021 to 15 Mt.

In the wake of Russia’s invasion of Ukraine, Germany’s BASF warned it would curtail production of ammonia because of the restricted European gas supplies. In June, the EUAgency for the Cooperation of Energy Regulators reported gas consumption had dropped 20.3% year-to-date.

“By establishing our own dedicated LNG supply chain with Cheniere, we are diversifying our energy and raw materials portfolio at a time of critical changes in the European gas market, which is marked by increased demand and volatile prices for LNG,” BASF CFO Dirk Elvermann said.

With the latest SPA, Cheniere has disclosed agreements with existing and new customers for at least 3 mmty of offtake from the first proposed train at Sabine Pass. Last year, Cheniere’s subsidiaries signed long-term contracts representing more than 180 mmty of aggregate LNG through 2050.

Along with existing capacity, and other expansions underway at Corpus Christi LNG, the Sabine Pass expansion would...cont’ pg. 8
Spot rates for LNG vessel charters are rising sooner than last year as natural gas buyers and sellers hone in on the winter supply scenario and global risks that still abound.

Spot vessel rates for liquefied natural gas deliveries east of the Suez canal reached about $100,000/day Friday for the first time since January and are continuing to tick up, according to data from Spark Commodities. Atlantic rates were $115,750/day by Tuesday while Pacific spot rates climbed to $108,000.

Atlantic and Pacific basin rates are rising about three weeks earlier in the year than last year, Spark CEO Tim Mendelssohn told NGI. The timing of when spot rates rise before winter is hard to compare from year to year, Mendelssohn added, as 2022’s mid-September shift came sooner than years prior. However, what is more clear is the fact that Europe’s supply anxiety, while less pronounced, is still playing out in the market.

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“Given what happened last year, there is perhaps some nervousness around the potential for high volatility going forwards, but it seems to be predominantly driven by the open arbitrage in recent weeks and the bullish sentiment moving into winter,” Mendelssohn said.

While global LNG trade volumes are trending above last year’s record levels, both prices and spot charter rates have been depressed compared to the volatile heights of 2022. Similarly, Spark forecasts spot charter rates will likely peak around $250,000/day in both basins by December, compared to $400,000 last October.

Mendelssohn said rates could be rising earlier in the year thanks to seasonal dynamics and an open arbitrage from the European Union’s (EU) higher than average gas storage levels, which is incentivising U.S. cargoes to flow to Asia, which increases ton miles and, therefore, demand on freight.

Analysts with Flex LNG wrote in its latest LNG market review that Europe’s quickened pace of storage filling also could also lend “support to floating LNG storage and near-curve freight rates in the coming months,” as firms rush to grab available modern LNG vessels.

“Broker quotes for three-year term rates for prompt modern tonnage are currently at around $120,000/day,” Flex analysts wrote. “Furthermore, elevated newbuild prices and higher...cont’ pg. 9
interest rates provide a foundation for higher term rates with brokers quoting 10-year term rates at around $100,000/day.”

EU gas storage levels have risen above 90% well before the bloc’s mandated timeline. Despite the quick filling of storage facilities across the bloc, risks of Asian competition for U.S. volumes from potential work stoppages in Australia have caused jumps in the Dutch Title Transfer Facility over the past few weeks.

“The question remains on what could happen this winter and if the premium market will be Europe or Asia,” Mendelssohn said.

In the latest market report from the Gas Exporting Countries Forum (GECF), analysts wrote Asian spot prices in September are “expected to trade at an average premium of $1.1/MMBtu” compared to TTF. That spread could widen in October to $1.5/MMBtu before narrowing again.

“However, in January and February 2024, the spread is projected to widen again to around $1.3/MMBtu,” GECF analysts wrote.

Potentially adding to the costs of LNG heading east is a growing stackup at the Panama Canal as the critical shipping gateway continues to be impacted by a regional drought. Early in the month, the canal authority reported it was reducing the number allowed vessels transits from 36 to 32 ships a day while trying to maintain a draft level of 44 feet.

The bottleneck has led to 20-day wait times for some ships and could cost the Panama Canal Authority up to $200 million in revenue compared to last year, according to media reports.

Jacob Dick

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He added, “there have been some positive developments… But, at the end of the day, we’re focused on the U.S. side and making sure we are in line with the overall timing and needs of the projects. So, that’s our focus right now.”

The MPL export project in Mexico meanwhile continues to add anchor customers to the point where trains one and two are now in “oversubscribed territory,” according to management. MPL also expects to reach FID later this year.

**Upping Guidance**

Oneok had another good quarter and is raising its financial projections for the year. The Tulsa, OK-based company primarily owns natural gas liquids (NGL) systems that carry supply from the Rockies, Midcontinent and Permian Basin to downstream market centers. It also has an extensive network of natural gas gathering, processing, storage and pipelines.


In the natural gas gathering and processing segments, second quarter processed volumes averaged around 2.2 Bcf/d, a 16% increase year-over-year.

In the natural gas pipeline segment, “the strong year-to-date results continue to benefit from demand for natural gas storage and transportation services,” Burdick said. “And we now expect the segment to exceed the high-end of its original earnings guidance range.”

Higher expectations were driven by volume growth, higher average fee rates and lower-than-expected third-party... cont' pg. 10

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### INFRASTRUCTURE

**Oneok Still Evaluating Saguaro Pipeline For Mexico LNG Export Project**

Midstreamer Oneok Inc. hopes to reach a final investment decision (FID) on its proposed 2.8 Bcf/d Saguaro Connector natural gas pipeline later this year.

The 155-mile pipeline would transport natural gas from the Waha hub in West Texas to the Mexico border. It would serve the Saguaro LNG export terminal proposed by Mexico Pacific Ltd. LLC (MPL), which also has yet to reach FID.

“We continue to evaluate the Saguaro Connector Pipeline, a potential intrastate pipeline project that would provide natural gas transportation to the U.S. and Mexico border for ultimate delivery to an export facility on the West coast of Mexico,” Chief Commercial Officer Kevin Burdick said during the company’s second quarter earnings call earlier this month.

“There continues to be positive developments related to the potential LNG export project with support from multiple large well-known customers, anchoring the project. We expect to make a final investment decision on the Oneok pipeline later this year.”

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*Source: Oneok Inc.*
NGL fractionation costs. Strong producer activity also helped, executives said.

The company expects total capital expenditure hitting around $1.575 billion in 2023.

Merger Closing In Q3

Earlier this year, the company announced that it had agreed to purchase Magellan Midstream Partners LP for $18.8 billion, which would add crude oil and refined products to its activities.

The merger is expected to close in the third quarter.

“As we work toward the successful closing of our pending merger transaction with Magellan, we also remain focused on the fundamentals of Oneok’s business that have gotten us where we are today,” CEO Pierce Norton said.

“We look forward to the strategic opportunities ahead of us through the combined companies, including opportunities to grow our existing legacy operations and further diversify our company through Magellan’s refined products and crude operations, providing compelling long-term value for our stakeholders.”

Net income was $468 million ($1.04/share) in the second quarter, compared to $414 million (92 cents) in the same quarter last year.

Christopher Lenton