

Despite Hype, Tellurian's LNG Plans Face an Uphill Battle

Is Tellurian's Driftwood LNG Plant Making Real Progress, or Blowing Smoke?

Executive Summary

Global liquefied natural gas (LNG) markets suffered through a dismal 2020 as the COVID-19 pandemic raged. But the rapid rebound in both demand and prices has rekindled speculation about a new round of construction for projects in the United States. Some of this speculation has been fueled by the public relations efforts of Tellurian Inc., the backer of the proposed Driftwood LNG project near Lake Charles, La., with a Phase 1 capacity of 11 million tons per year (MTPA) and an estimated price tag of \$12 billion.¹

Tellurian recently announced that the company had secured LNG purchase agreements with Shell and international commodities traders Vitol and Gunvor to buy LNG from Driftwood, Tellurian's only project.^{2,3,4} Each buyer would purchase 3 MTPA for 10 years, with prices tied to Asian and European spot natural gas pricing benchmarks. Tellurian now says it will focus on financing the project based on these contracts, and aims to give its construction contractor, Bechtel, the go-ahead sometime early next year.⁵ Tellurian, which has already secured its main permit from the Federal Energy Regulatory Commission (FERC), said the new contracts will give lenders security to provide more than 65 percent of the money needed to build the \$12 billion terminal, and will allow the company to attract project sponsors to put up another \$3 billion of owner equity, which is the next step toward a Final Investment Decision (FID) later this year or in 2022.

Yet a closer look at Tellurian's history and finances, as well as the structure of the new LNG deals, reveals a far less rosy view for the company's prospects. All U.S. LNG projects now in operation were anchored by firm, 20-year contracts with guaranteed liquefaction fees that assured enough revenue to cover debt repayments, operating costs, and profit. In contrast, Tellurian's new contracts offer less security and more risk. After just 10 years—long before Tellurian has paid off Driftwood's capital costs—the company will have to sign new contracts at unknown terms with undefined buyers. The new contracts could leave Tellurian's equity investors and lenders stranded if long-term LNG prices fall.

¹ Tellurian. [Corporate presentation](#). August 2021.

² Tellurian. [Form 8-K](#). July 29, 2021.

³ Reuters. [Tellurian signs 10-year LNG agreement with Vitol for 3 MTPA](#). June 3, 2021.

⁴ Reuters. [Tellurian to sell LNG to Gunvor, delays Louisiana project start](#). May 27, 2021.

⁵ S&P Global Platts. [Tellurian says talks with banks underway for \\$12 billion Driftwood LNG project](#). August 9, 2021.

In addition, under the new contracts, Driftwood's LNG revenues will be linked to volatile international LNG price indices that can't be hedged effectively, and whose revenues may not cover the plant's financing and operating costs. Tellurian claims it can reduce its long-term gas price risks by producing its own gas for LNG export. But transforming the company into a major gas producer as well as an LNG developer would require billions of dollars of up-front capital expenses, and the company has put forward no credible financing plan for its gas production ambitions.

Neither the financial shortcomings of the recent LNG contracts nor the hype surrounding them are new to Tellurian. The company has led its investors on a roller-coaster ride for years, making frequent shifts in business strategy even as its stock price soared, then collapsed, then gained some ground, then sagged again. Meanwhile, Tellurian has burned through hundreds of millions of dollars of investors' cash with few tangible results. While Tellurian's new LNG contracts seem to offer a rare bit of good news for the company, bankers may not find Driftwood's financial prospects nearly as enticing as announcements by the company and its boosters.

The Tellurian Roller Coaster

Tellurian was the brainchild of Charif Souki, founder and former chief executive officer of U.S. LNG giant Cheniere Energy. As reported by the Houston Business Journal, Souki had been the highest-paid CEO in the country in 2013, but Cheniere's board ousted him in 2015 after Souki championed aggressive growth plans, including oil trading, even before the company had completed its first LNG export terminal.⁶

In February 2016, shortly after being forced out of Cheniere, Souki partnered with LNG industry veteran Martin Houston to launch Tellurian by restructuring Houston's existing LNG development company, Parallax Energy.⁷ Tellurian was engulfed in controversy from the start. As Cheniere's CEO, Souki had approved a \$46 million loan from Cheniere to Parallax.⁸ According to Cheniere, after the company fired Souki, he and Houston hatched a plan to liquidate Parallax and create Tellurian without repaying Cheniere and other investors. The maneuver landed Souki and Tellurian in court,⁹ with Cheniere pressing for repayment of the \$46 million loan plus damages.^{10,11} Some Parallax executives also sued Tellurian in the United Kingdom, receiving a settlement payment in a London court. Separately, prospective investors sued Tellurian for fraud and breach of contract, a case that was resolved

⁶ Houston Business Journal. [Cheniere Energy: The makings of a CEO ousting](#). December 14, 2015.

⁷ Houston Business Journal. [LNG company establishes headquarters in Houston](#). October 23, 2014.

⁸ Reuters. [U.S. LNG exporter Cheniere sues former CEO Souki](#). February 26, 2019.

⁹ *Ibid.*

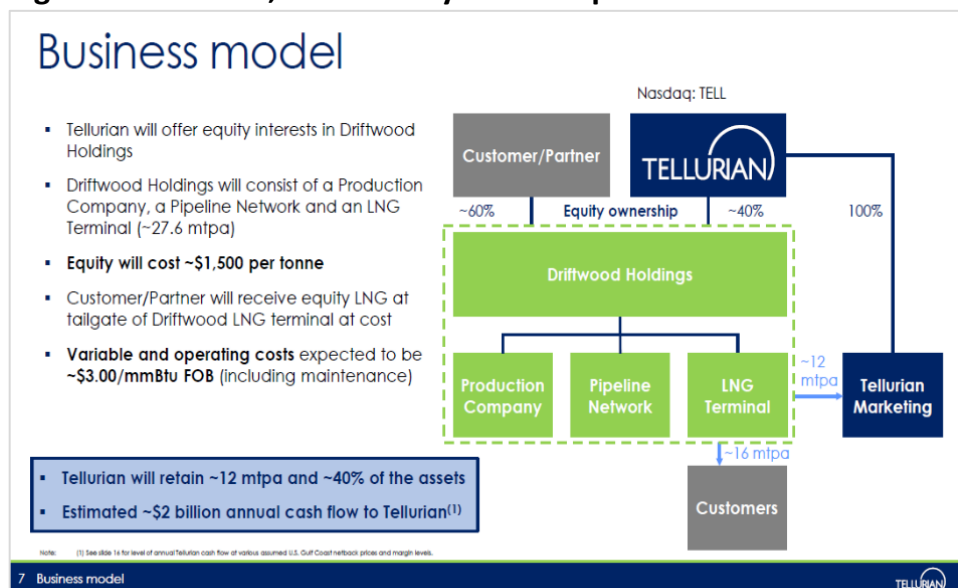
¹⁰ The Houston Chronicle. [Judge dismisses Cheniere lawsuit against former CEO Charif Souki and Tellurian](#). January 30, 2020.

¹¹ U.S. District Court for the Southern District of Texas. [Cheniere LNG Terminals, LLC v. Parallax Energy LLC et al, Case 4:2016cv00286](#). February 3, 2016.

after Tellurian's vice chairman personally transferred 2 million shares of stock to the plaintiffs and their attorneys.^{12,13}

Soon after it was formed, Tellurian announced its ambitious Driftwood LNG project, to be built on the same site as a proposed Parallax project called Live Oak LNG.¹⁴ Over time, more details emerged.¹⁵ Driftwood would be built in multiple stages, with an 11 MTPA first phase that Tellurian said would cost \$12 billion, including storage and a loading dock. Later expansions would follow for a total project of 27.6 MTPA at an estimated cost of \$24 billion.¹⁶ The company attracted several early high-profile funders. General Electric—the company slated to supply Driftwood's liquefaction technology—paid \$25 million to purchase preferred stock in the company in November 2016.¹⁷ A month later, Tellurian announced that global oil and gas giant Total (now rebranded as TotalEnergies) would acquire a 23% stake in Tellurian for \$207 million.¹⁸ Tellurian reportedly secured the TotalEnergies investment based on the company's previous business relationships with Souki and Houston from their work on contracts from the Cheniere Sabine Pass LNG export project.

Figure 1: Tellurian, Inc. January 2018 Corporate Presentation



Source: Tellurian, Inc. January 2018 Corporate Presentation.

To raise the rest of the capital needed to build Driftwood, Tellurian proposed a novel funding scheme. Rather than securing a mix of equity investors and debt

¹² Tellurian. [Index to the Financial Statements of Tellurian Services LLC](#). March 15, 2017.

¹³ Tellurian. [Calculation of Registration Fee](#). February 10, 2017.

¹⁴ Federal Energy Regulatory Commission. [Re: Approval of Pre-Filing Request](#). June 6, 2016.

¹⁵ Tellurian. [Corporate presentation](#). January 2018.

¹⁶ Offshore Energy. [Tellurian lining up partners for Driftwood LNG](#). May 10, 2018.

¹⁷ Magellan Petroleum Corp. [Form 8-K](#). November 28, 2016.

¹⁸ TotalEnergies. [Total makes \\$207 million investment in Tellurian to develop integrated gas project](#). December 20, 2016.

financing (as has been typical for other LNG projects around the world), Tellurian hoped to recruit equity partners who would provide all project capital. For a \$1.5 billion up-front payment, equity partners would secure access to 1 MTPA for 20 years, which Tellurian would provide “at cost.” (See Figure 1.) The financing structure offered huge benefits to Tellurian, which would avoid all interest payments. It was less enticing to potential investors, who would secure access to LNG for 20 years but never get their initial investments back.

The financing plan had another serious flaw: Tellurian would retain 11.6 MTPA of Driftwood's total output, or about 40 percent of the plant's capacity. In effect, this meant that Tellurian's equity partners would provide startup funding to a direct competitor. Unsurprisingly, no investors signed on.

Figure 2: Tellurian January 2020 Corporate Presentation



Source: Tellurian, Inc. January 2020 Corporate Presentation.

In August 2018, Tellurian modified its proposed business model to allow for \$3.5 billion debt financing and \$24 billion in equity financing.¹⁹ Again, there were no takers. The following January, it changed tack, allowing for as much as \$20 billion in debt; still, no takers.²⁰

A few months later, the company began projecting an unusually low price for LNG of only \$3.50/MMBtu (million British thermal units), delivered to a ship at the Driftwood dock.²¹ In contrast, other LNG exporters typically see free-on-board

¹⁹ Tellurian. [Corporate presentation](#). August 2018.

²⁰ Tellurian. [Corporate presentation](#). January 2019.

²¹ In its [April 2019 Business Update](#), Tellurian said that it “expects to deliver LNG FOB U.S. Gulf of Mexico for \$3.50/MMBtu.” In its [August 2019 corporate presentation](#), Tellurian described \$3.50/MMBtu LNG FOB costs as its “Optimistic case” but said that it might be able to achieve costs as low as \$2.35/MMBtu with gas sourced from the Permian Basin at 50 cents/MMBtu. In its

(FOB) costs of \$6.25 or more, including gas supplies, pipeline transportation costs, and fixed liquefaction fees. Tellurian's cost estimates assumed rock-bottom gas supply costs well below the long-term natural gas futures price.²² They also assumed no return to equity, pushing substantial market risks onto equity holders. (See Figure 2.) Tellurian's low-cost claims seemed too good to be true and attracted no takers.

Figure 3: London Offices of Tellurian, Inc.



Source: Five Interiors. Used with permission.

Tellurian explained its low-cost structure as stemming from full vertical integration. The company planned to own not only a liquefaction plant, but also a network of massive gas pipelines, as well as a massive gas production operation in the Haynesville Basin in north Louisiana and east Texas.²³ The company claimed integration would insulate it from market volatility and control costs, but in practice it added to the company's thirst for capital. Tellurian estimated its proposed pipeline system would cost more than \$7 billion for three lines.^{24,25} Upstream gas development would add billions more. The costs would have to be funded upfront before any LNG could be exported, and would come on top of the \$12 billion price tag for the liquefaction project's first phase.²⁶ Measured per ton of LNG, the costs of

January 2020 corporate presentation, Tellurian claimed an "Average cost on the water" of \$3.50/MMBtu. By September 2020 Tellurian claimed that the Driftwood's free-on-board cost for LNG would be less than \$3.50/MMBtu, and that the company would produce its own gas in the Haynesville at a cost of less than \$2.00/MMBtu.

²² CME Group. [Henry Hub Natural Gas](#).

²³ Pipeline & Gas Journal. [Tellurian Files for FERC Review of Permian Global Access Pipeline](#). August 23, 2019.

²⁴ Tellurian. [Tellurian Announces Binding Open Season for the Permian Global Access Pipeline](#). April 8, 2019.

²⁵ Tellurian. [Tellurian announces intent to develop three pipelines as part of a Tellurian Pipeline Network](#). December 18, 2017. Note: In August 2020, Tellurian abandoned plans for three of its proposed pipelines. S&P Global Platts. [Tellurian drops three gas pipelines from first phase of US LNG export project](#). August 12, 2020.

²⁶ Tellurian. [Tellurian signs agreements with Bechtel to deliver Driftwood LNG at ~\\$550 per tonne](#). November 13, 2017.


the Driftwood liquefaction plant alone were higher than proposed expansions at existing plants such as Freeport, Cameron and Sabine Pass, which may have contributed to investors' reluctance to provide Tellurian with capital. Tellurian's presentations maintained a face of sunny optimism, but no matter how the company changed its business strategy, it couldn't attract investors. Despite struggling to contract with buyers, Tellurian earned a reputation for lavish spending. Without a single functioning LNG project to its name, the company went on an international hiring spree, hiring 172 employees and launching an international sales operation with stylish, luxurious offices around the globe.^{27,28} (See Figure 3.)

The spending went beyond staff and office space. In November 2017, Tellurian purchased Haynesville shale natural gas acreage in Louisiana for \$85 million, the company's first foray into the upstream gas production.²⁹ But Tellurian overpaid. At the end of 2020 Tellurian wrote down the value of its Haynesville assets by \$81 million, suggesting that the company had paid about 20 times as much for the acreage as it was worth.³⁰ As of 2021, its gas assets have produced only 30 to 40 MMCFD (million cubic feet per day), less than 1 percent of the total supply that Tellurian needs for Phase I of its export plans.³¹

Figure 4: Tellurian, Inc. September 2019 Corporate Presentation

Tellurian MOU with Petronet LNG

- On September 21, 2019, Tellurian and Petronet LNG Limited INDIA ("Petronet LNG") signed a memorandum of understanding ("MOU") for up to five million tonnes per annum ("mtpa") of liquefied natural gas ("LNG") through an equity investment in Driftwood
 - MOU coincided with the visit of Prime Minister Narendra Modi to Houston and public event with President Donald Trump
- Parties have agreed to finalize transaction agreements by March 31, 2020
- With MOU update, Driftwood plans to start construction in 2020

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Source: Tellurian, Inc. September 2019 Corporate Presentation.

Even apparent successes soured quickly for Tellurian. In September 2019, India-based Petronet signed a non-binding deal to contribute \$2.5 billion to secure 5

²⁷ Tellurian. [Form 10-K](#). December 31, 2018.

²⁸ See, e.g., the photo portfolio of Tellurian's [London offices](#), including the *Matterhorn Conference Room*, courtesy of [Five Interiors](#).

²⁹ Tellurian. [Form 8-K](#). November 15, 2017.

³⁰ Tellurian. [Form 10-K](#). December 31, 2020.

³¹ Tellurian. [Two minutes with Charif Souki on paying down debt and maximizing opportunity](#), 0:50. March 16, 2021.

MTPA of LNG.³² (See Figure 4.) But in February of 2020, Petronet declined to appear at a planned signing ceremony in India, slated to include then-President Donald Trump.³³ The deal never got back on track, and in late 2020, Petronet's CEO revealed that the company had allowed the supply agreement with Tellurian to expire.³⁴

The collapse of the Petronet deal was just one of many recent disappointments for the company. In 2020, as global LNG demand waned, Tellurian slashed 40% of its staff.³⁵ Meanwhile, Tellurian's relationship with early investor TotalEnergies soured. In addition to its startup investment of \$207 million in 2017, TotalEnergies had signed preliminary agreements in 2019 to make an additional \$500 million equity investment in Tellurian when construction was to begin, take 1 MPTA in capacity, and purchase an additional 1.5 MTPA from Driftwood for 15 years.³⁶ But in May 2020, TotalEnergies CEO Patrick Pouyanné declared that there was "no reason it would be sensible to move forward" with the project in the short term.³⁷ From March through May 2021, TotalEnergies sold most of its stake in Tellurian at a steep loss.³⁸ In July 2021, Tellurian put a positive spin on TotalEnergies' exit, saying that Tellurian itself had terminated its supply agreement with TotalEnergies because it was "not consistent with the commercial agreements that Driftwood ... has reached with other counterparties."³⁹ To all appearances, however, Tellurian was putting a brave face on a commercial disappointment: Losing a 15-year deal with a global energy superpower, and replacing it with 10-year contracts with merchant trading companies, the only deals the company could secure.

Despite years of difficulty in securing buyers, the company continually wooed Wall Street and the press with promises and projections for the company's glowing prospects, many of which would turn out to be wildly optimistic.

- In August 2018, then-CEO Meg Gentle repeatedly said the company planned to begin construction of the terminal in 2019 and begin operations in 2023.^{40,41,42} She repeated the claim in January 2019.

³² Tellurian. [Form 8-K](#). September 21, 2019.

³³ Reuters. [Petronet LNG to sign \\$2.5 bln U.S. gas deal during Trump's India visit](#). February 2, 2020.

³⁴ Business Standard. [Deal with Tellurian for 40-year gas supply no longer exists: Petronet LNG](#). June 10, 2021.

³⁵ Financial Times. [Trouble flares for US energy upstart Tellurian](#). June 10, 2020.

³⁶ Tellurian. [Total and Tellurian Finalize Driftwood Equity Investment and LNG Purchase Agreements](#). July 10, 2019.

³⁷ S&P Global Platts. [Tellurian drops three gas pipelines from first phase of US LNG export project](#). August 12, 2020.

³⁸ Tellurian. [Schedule 13D](#). March 15, 2021. Also see: Tellurian. [Schedule 13D](#). April 28, 2021. Also see: Tellurian. [Schedule 13D](#). May 11, 2021.

³⁹ Reuters. [Tellurian terminates Total agreement on Louisiana Driftwood LNG plant](#). July 12, 2021.

⁴⁰ Reuters. [Tellurian Plans To Start Building Louisiana LNG Export Plant In 2019](#). August 9, 2018.

⁴¹ Reuters. [Tellurian plans to start building Louisiana LNG export plant in 2019](#). August 8, 2018.

⁴² Reuters. [Tellurian on track to start building Louisiana LNG export plant in 2019](#). November 7, 2018.

- In December 2019, the company said it would begin construction in 2020, but still begin LNG production in 2023.⁴³
- In early 2020, Gentle said the company would “complete our financing in the coming months.”⁴⁴
- In late 2020, just hours after the Petronet deal had fallen through, Souki claimed that he had lined up other buyers for Driftwood’s full 11 MTPA capacity, with construction expected to start in the summer of 2021.⁴⁵
- In early 2021, Souki said once again that he expected Driftwood construction to begin in the summer.⁴⁶
- In a February 2021 press release, Tellurian President and CEO Octávio Simões said: “Tellurian is in a strong financial position ... our Haynesville Shale wells have outperformed to unlock value, providing domestic natural gas supply and a valuable contribution to our integrated Driftwood model which will offer low-cost LNG to the world.”⁴⁷ These were the same reserves that Driftwood wrote off as unrecoverable at the end of 2020.

Tellurian’s dismal financial results belie the optimism of its executives. The company’s reports to the U.S. Securities and Exchange Commission reveal that Tellurian consistently lost money and rapidly burned through cash. From 2016 through the second quarter of 2021, the company garnered \$803 million by selling stock to investors. In the process, it racked up cumulative losses of \$874 million, spent \$477 million on operations, and another \$202 million for investments that have yielded few tangible results. (See Table 1.) The company spent the lion’s share of its cash investments on Haynesville Basin natural gas properties, but it has already written off the bulk of that purchase as unrecoverable. The company’s other major cash investment was \$45 million spent on engineering costs for a project that has yet to see any progress on the ground. The project has secured its permits from FERC two years ago, but construction still has not begun.

⁴³ Reuters. [U.S. allows Tellurian to start site prep work on Louisiana Driftwood LNG export plant](#). December 12, 2019.

⁴⁴ Tellurian. [Tellurian Reports 2019 Results](#). February 24, 2020.

⁴⁵ Bloomberg Quint. [Tellurian’s Souki Seeks New Asia Gas Deals After Petronet Rebuff](#). November 14, 2020.

⁴⁶ Offshore Energy. [Driftwood LNG construction to start this summer](#). January 15, 2021.

⁴⁷ Tellurian. [Tellurian Reports 2020 Results](#). February 24, 2021.

Table 1. Cumulative Financial Results, Tellurian Inc.

Cumulative Financial Results, 2016-June 2021	Total (thousands)
Proceeds from the issuance of common stock	\$802,723
Net loss	(\$873,905)
Net cash used in operating activities	(\$477,338)
Net cash used in investing activities	(\$201,758)

Source: IEEFA, derived from Tellurian 10-K and 10-Q filings with the SEC.

Despite the steep losses, Tellurian paid its top executives handsomely. All told, from 2016 through 2020, total compensation for the company’s top five leaders in any year totaled \$48.4 million, which included \$9.9 million in base salaries, \$6.8 million in bonus awards, \$29.5 million in stock and option awards, and an another \$2.1 million in other compensation.⁴⁸

Tellurian executives have continued to hide the company’s financial struggles behind an optimistic face. In May 2021, Souki said the company was “just weeks” from finishing commercialization for the first phase of the Driftwood plant.⁴⁹ Over the next several weeks, the company’s stock bounced from \$2.04 to more than \$5 per share.⁵⁰ Souki also said that he expected to make a final investment decision and release Bechtel to start construction early in 2022. (He failed to mention that the company still needs to convince lenders to loan money based on only 10-year deals, and also has to find the \$3.6 billion of owner’s equity to go with the bank debt for the \$12 billion Phase 1 of Driftwood.) In a July 2021 video,⁵¹ Souki said the company’s primary focus in the coming months will be acquiring gas reserves and boosting drilling to raise its current gas production from 30,000 MMBtu/d to roughly 100,000 MMBtu the end of 2021, on the way to 1.5 million MMBtu (about 1.5 BCF/d (billion cubic feet per day)) to support its Phase 1 LNG exports of 11 MTPA.

In late May 2021, the company announced that it had signed purchase and sale agreements with Gunvor,⁵² followed in June with Vitol and by Shell in late July.^{53,54} Each company would buy 3 MTPA of LNG, or 9 MTPA out of a total of 11 MTPA available in the first phase of the project, for 10 years after the facility is built. Full pricing details remain confidential, but the 10-year term LNG sales pricing is indexed to a combination of spot natural gas prices in Europe and Northern Asia.⁵⁵

⁴⁸ Tellurian. [SEC Form DEF-14A](#).

⁴⁹ Houston Chronicle. [Phase one of Tellurian’s Driftwood LNG plant close to commercialization](#). May 13, 2021.

⁵⁰ Google. [Tellurian Inc.](#)

⁵¹ Tellurian. [Two minutes with Chairman Charif Souki on analyzing our progress](#). July 20, 2021.

⁵² Reuters. [Tellurian to sell LNG to Gunvor, delays Louisiana project start](#). May 27, 2021.

⁵³ Reuters. [Tellurian signs 10-year LNG agreement with Vitol for 3 MTPA](#). June 3, 2021.

⁵⁴ Tellurian. [Form 8-K](#). July 29, 2021.

⁵⁵ The European spot price is fixed at the Title Transfer Facility (TTF), a virtual trading point for natural gas in the Netherlands. The North Asia Pacific region spot price is Platt’s Japan Korea Marker (JKM). Note that Shell’s contract with Tellurian is linked only to JKM prices.

While these agreements may seem like wins for Tellurian, a closer analysis of these contracts and of the overall LNG market reveals that the company could still face an uphill battle in securing bank debt project financing for its Driftwood LNG project.

Weak Contracts in a Competitive Market

Tellurian has announced four different LNG sales and purchase agreements (SPA) in the past several months: One on May 27 with international commodity trader Gunvor,⁵⁶ another with trading house Vitol on June 3,⁵⁷ and two separate agreements with global oil and gas giant Shell on July 29.⁵⁸

Gunvor, Vitol, and Shell have each agreed to purchase 3 MTPA of LNG on a free-on-board (FOB) basis loaded on vessels at Driftwood LNG. The contracts will last for 10 years after the facility goes into service. The Vitol and Gunvor agreements are pegged to combination of two indices—the Japan Korea Marker (JKM) and the Dutch Title Transfer Facility (TTF), each netted back for LNG shipping transportation charges. Shell has two agreements, a 1 MTPA purchase agreement pegged to JKM and a 2 MTPA agreement pegged to TTF.

Simões expressed confidence that the agreements would pave the way for full financing of the Driftwood LNG project. “With these SPAs,” he said in a press release, “we have now completed the sales to support the launching of the first two plants. Tellurian will now focus on financing Driftwood, in order to give Bechtel notice to proceed with construction in early 2022.”⁵⁹

Yet these contracts, tied to international spot indices, would represent a fundamental shift in the financial structure of the U.S. LNG industry. We note that traditional LNG terminal financing is based on fixed-price capacity contracts defining cash flow and baseline security for lenders. Such a shift creates enough risks for Driftwood that lenders may deem the project unfinanceable based on the 10-year terms and the international indices instead of fixed price capacity payments. At the same time, Tellurian is seeking a massive capital infusion while the company is attempting to tie its debt financing to more volatile international indices. Today, the netback price is attractive, with both TTF and JKM above \$11/MMBtu. But summer 2020 prices were below \$3/MMBtu, meaning it would have been unlikely there would have been anything left for Tellurian. The low prices explain much of the unused U.S. LNG capacity last summer.

Ten-year contracts lack long-term security and base cash flows. Each of the major U.S. LNG plants that are either operating or are now under construction have signed 20-year sales contracts with creditworthy counterparties, covering most of plant output.⁶⁰ Such contracts give both lenders and equity owners the long-term security of a guaranteed revenue stream for enough time to pay back the project's

⁵⁶ Tellurian. [Form 8-K](#). May 27, 2021.

⁵⁷ Tellurian. [Form 8-K](#). June 2, 2021.

⁵⁸ Tellurian. [LNG Sale and Purchase Agreement](#). July 29, 2021.

⁵⁹ Tellurian. [Tellurian and Shell sign agreements for 3 mtpa](#). July 29, 2021.

⁶⁰ IHS Markit. LNG Analytics. Note that the large majority of the contracts that anchored the first wave of U.S. LNG projects extended for 20 years.

initial construction costs and operating expenses (as is the norm in project-financed assets based on cash flow from defined contracts). But Tellurian's current deals expire after 10 years, which would force the company to re-sign contracts, on unknown terms and uncertain volumes, long before the company has fully paid off the enormous capital costs of the project. Lenders will most likely perceive Tellurian's spot indexed contracts as far riskier than the 20-year fixed price capacity contracts that anchored the first wave of LNG development in the U.S. and most projects around the world.

Revenues are volatile and may not cover capital costs. Most other U.S. LNG projects—both those that are already operating and those that are still under construction—secured fixed price long-term contracts that provide guaranteed, fixed fees for liquefaction services and most operating costs, regardless of the market price of gas. But Tellurian's new contracts do not appear to offer the traditional guaranteed liquefaction fees. Instead, Driftwood's customers would pay for LNG based on a formula tied to international spot gas prices as they fluctuate monthly and seasonally. If markets take a wrong turn—say, international LNG prices are low at the same time U.S. LNG prices are high—Driftwood's fees might not cover the project's financing and operating costs. Tellurian plans to hedge this risk by owning and developing its own gas supplies. Raising the capital to become a major gas producer would add to the company's financial challenges. The dismal financial track record of much of the U.S. fracking sector, coupled with Tellurian's write-down of its first major purchase of gas assets, provide little confidence that this hedging strategy will succeed.⁶¹ Also, Tellurian will need 15 trillion cubic feet (TCF) of proved gas reserves to provide the gas supply for the Phase 1 for 10 years, which would make it one of the larger gas producers in the U.S., starting virtually from scratch. Souki says the company needs those reserves in place before it will proceed with the Driftwood Project,⁶² but it is doubtful that they can establish this gas reserve position by early 2022, when the company says it plans to begin construction.

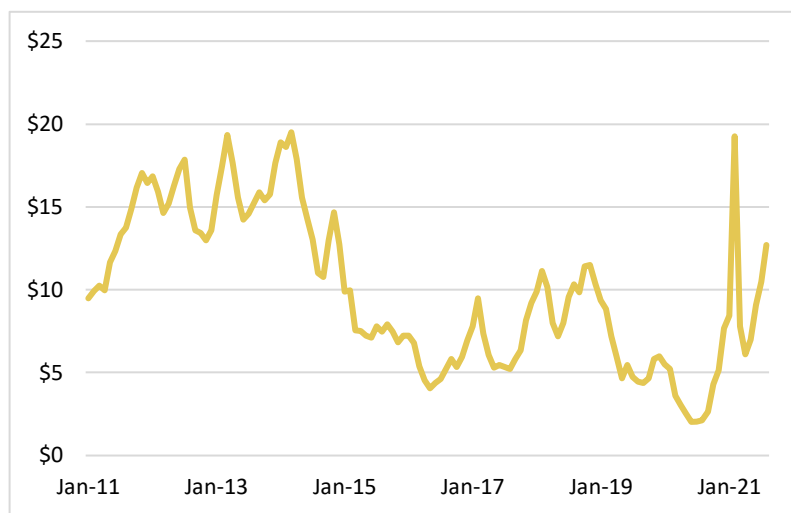
In a July 2021 interview with Natural Gas Intel,⁶³ Michael Smith the CEO of Freeport LNG and its largest shareholder, said deals indexed to Japan-Korea Marker (JKM) and Dutch Title Transfer Facility (TTF) prices could be risky if U.S. natural gas prices spike above the JKM and TTF benchmarks. That situation could force suppliers to pay more for feed gas than the cargo, he said. "It's not a financeable solution," Smith said. "I could take that risk on my excess capacity, but I'm not taking that risk. That's a crazy risk to take. The only way I would take that risk is if there was a formula where I had some floor, and I shared in the upside."

⁶¹ IEEFA. [Pandemic Accelerates Dismal Financial Performance of U.S. Fracking Companies.](#) September 2020.

⁶² S&P Global Platts. [Tellurian to finish commercialization of Driftwood LNG first phase in few weeks: Souki.](#) May 12, 2021.

⁶³ Natural Gas Intel. [Freeport LNG Eyes 2022 to Sanction Fourth Train as Market Undergoes 'Total Transformation.'](#) July 9, 2021.

Figure 5: North Asian LNG Spot Prices



Source: IHS Markit.

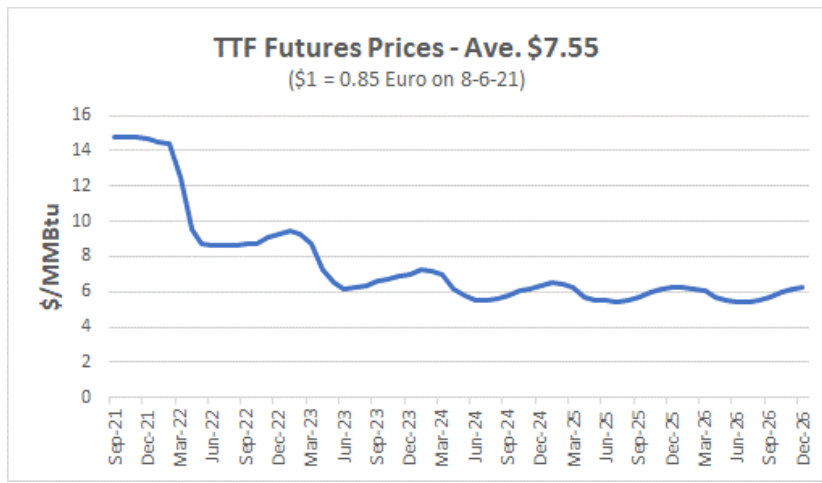
Difficult to hedge. International LNG prices are notoriously volatile. (See Figure 5.) For some commodities, market actors can employ hedging strategies to control risks in volatile markets. But even if Tellurian wanted to use hedges to manage long-term LNG pricing risk, it couldn't. For example, northern Asian LNG futures contracts are thinly traded and only extend five years forward from the current year.⁶⁴ As a result, there's currently no current financial instrument that Tellurian could use to hedge its long-term, 10-year pricing exposure to volatile international gas prices.

Revenues appear unrealistic. Although Tellurian has not disclosed all contract terms, it has claimed that at today's prices, its Vitol agreement will produce about \$12 billion in revenue for 3 MTPA over 10 years.⁶⁵ Based on volumes alone, Tellurian's expected revenues for 1.539 billion MMBtu over 10 years suggest that it will receive \$7.80/MMBtu at the dock to cover liquefaction costs, gas cost, pipeline transportation and overheads. Yet it will be hard for investors to rely on these long-term revenue estimates, since they are based on indices that fluctuate daily and seasonally through the year, and that do not allow for long-term hedging. The TTF and JKM prices were below \$3 last summer. As an example, the futures prices for TTF (including the 2020-21 winter's very high prices) are closer to \$7.55/MMBtu. (See Figure 6.) After subtracting shipping costs of approximately \$1.20/MMBtu, this leaves estimated revenues of roughly \$6.35/MMBtu, far below Tellurian's estimates, even with today's extremely high prices included in the long-term average.

⁶⁴ CME Group. [LNG Japan/Korea Marker \(Platts\) Futures – Quotes](#).

⁶⁵ Tellurian. [Tellurian and Vitol sign 10-year LNG agreement for 3 mtpa](#). June 3, 2021.

Figure 6: TTF Futures Prices



Source: Spitfire Energy, based on data from CME Group.

Ten-year contracts don't match up to typical longer ship charters. The Gunvor and Vitol deals sell at the dock so the buyers will provide the shipping, with ships costing roughly \$200 million to \$220 million each. Typical ship charters last 15 years, which brings down the unit cost per MMBtu. But 10-year charters will require a higher rate, making their LNG less competitive to buyers. The 10-year sales contracts are not a good match for long-term shipping charters and could lead to higher shipping costs. It's like a home mortgage: The longer the term, the lower the monthly payments to repay the cost of the home (or ship). Traders want the lowest monthly charter possible to keep costs low for reselling into the market. Fifteen-year contracts are better for them because of lower rates.

Figure 7: LNG Projects near Driftwood LNG



Source: Spitfire Energy Advisors, derived from Tellurian, Inc. corporate presentations.

A crowded neighborhood. Tellurian is proposed to build in a crowded neighborhood with many existing LNG export terminals, some of which have fully permitted expansions approved for lower costs than a new Driftwood project. (See Figure 7.) The company will be competing for financing with larger, more experienced, and better capitalized companies with projects that offer significantly lower capital costs. Existing plants at Freeport, Sabine Pass and Cameron all have fully permitted capacity expansions, which have much lower costs than the Tellurian Phase 1. Tellurian's announced Phase 1 cost is \$12 billion for 11 MTPA output, or \$1,090 per tonne of installed capacity, which is far higher than key competitors. For example, Cheniere's train six expansion now in construction has an announced cost of \$2.5 billion for 4.7 MTPA of added capacity, or a cost of \$535 per tonne of installed capacity.⁶⁶ In addition, the Cheniere expansion is backed by the long-term security of three 20-year contracts, covering 4.1 MTPA, with Sinopec, Petronas and PGNiG of Poland.

Existing exporters have spare LNG to sell. In the U.S. alone, more than 17 million metric tons per year of LNG may be sold on spot markets or through short-term contracts, rather than long-term commitments. Shell has no dedicated customers lined up for the 2.4 MPTA of liquefaction capacity it buys from the Elba Island facility in Georgia, so it sells individual cargoes on the global spot market.⁶⁷ Cheniere Energy is looking for committed buyers for as much as 7 MTPA of uncontracted capacity from its existing plants.⁶⁸

The list goes on. The situation will worsen when ExxonMobil and Qatar Petroleum finish the Golden Pass LNG plant in Louisiana in 2024, with 18 MTPA looking for buyers. It will get worse again when Shell and its partners complete the first phase of the LNG Canada project, with 14 MPTA in capacity but less than 4 MTPA in term contracts. International competition is also strong with other LNG projects coming online, including a massive upgrade in Qatar that is planned to add more than 40 MTPA. Prospective lenders will look carefully at the increasingly competitive landscape that Tellurian faces, filled with spare LNG capacity looking for a committed home.

Conclusion

Despite the confidence expressed by Tellurian's management, there are serious questions about how lenders will view the company's new LNG contracts. The contracts that anchored the first round of U.S. LNG plant construction all provided guaranteed liquefaction fees for 20-year terms. Tellurian's contracts, in contrast, push a multitude of risks onto the company's books that they cannot manage and cannot afford. We should know within the year whether Tellurian will be able to obtain project financing, ramp up natural gas production, and finally let investors off their roller coaster ride.

⁶⁶ Reuters. [Cheniere to build Louisiana Sabine Pass 6 LNG export train](#). June 3, 2019.

⁶⁷ EIA. [Natural Gas Weekly Update](#). October 28, 2019.

⁶⁸ The Motley Fool. [Cheniere Energy Partners L P \(CQP\) Q1 2021 Earnings Call Transcript](#). May 4, 2021.

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