



**Comments of the Institute for Energy Economics and Financial Analysis to the
Federal Energy Regulatory Commission regarding the Notice of Preparation of a
Draft Supplemental Environmental Impact Statement for Texas LNG Brownsville
LLC,
Docket No. CP16-116-000**

May 19, 2025

The Institute for Energy Economics and Financial Analysis (IEEFA), a nonprofit organization focused on research and analysis of global energy markets and trends, provides the following comments in response to the Notice of Preparation of a draft supplemental Environmental Impact Statement (EIS) for Texas LNG Brownsville LLC, Docket No. CP16-116-000. These comments are intended to address new or omitted information that was either not available or not considered by the applicant or the Federal Energy Regulatory Commission (FERC) in the supplemental draft EIS that impact the determination of whether the project is inconsistent with public interest.

The proposed Texas LNG project involves the construction of a liquefied natural gas (LNG) export terminal with 4 million tonnes per annum (MTPA) of nameplate liquefaction capacity located on the Brownsville Ship Channel near Port Isabel, Texas. Our comments address the question of whether the economic risks of this project align with public interest.

U.S. Natural Gas Fundamentals

Today, the U.S. LNG industry is on the path to devour the key component of its value proposition—low feedgas prices due to oversupply. Review of the changes to natural gas supply in the United States over the last decade clearly illustrates that buildout of LNG export terminals was predicated on rapid expansion of domestic natural gas production. (See Figure 1.)

It was this hastened depletion of shale formations via hydraulic fracturing that created an oversupplied environment. And oversupplied conditions have fundamentally suppressed natural gas prices domestically.

Figure 1: Components of U.S. Natural Gas Supply

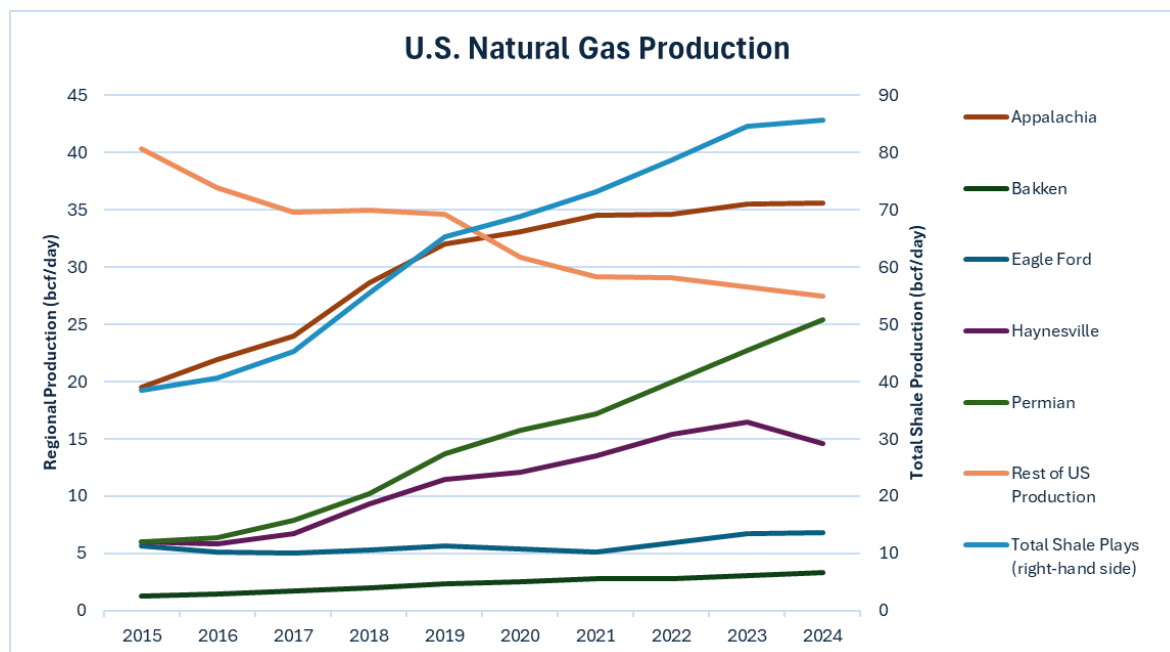
Decade Summary of U.S. Natural Gas Supply Changes (billion cubic feet per day)

From:	2015	2024	Change
Major Shale Production	38.5	85.7	47.2
Othe U.S. Gas Production	40.3	27.5	(12.8)
Imports	7.5	8.5	1.0
Total (bcf/day)	86.3	121.7	35.4

Source: U.S. Energy Information Administration¹

As seen in Figure 2 (orange line), natural gas production has been declining steadily in areas outside the major shale play regions of Appalachia, Bakken, Eagle Ford, Haynesville, and Permian. Furthermore, the cumulative growth trajectory of major shale plays (light blue line) is flattening. In 2024, year-over-year shale gas production growth increased 1%, the slowest pace on record over the last 10 years.

Figure 2: U.S. Marketed Natural Gas Production (billion cubic feet per day)



Source: U.S. Energy Information Administration²

Conversely, since the United States initiated waterborne LNG exports in 2016, LNG trade flow has grown exponentially from the buildout of LNG export terminals (from zero to eight in operation). Currently, the United States exports more LNG than any other country in the world. In the first year, U.S. LNG exports comprised less than 1% of domestic natural gas production. In 2024, the U.S. LNG industry exported the equivalent of 12% of total U.S. natural gas demand (~103 Bcf/day including LNG exports).

Natural gas also supplanted coal in 2016 as the primary source of fuel used to generate electricity in the United States.³ As we see in Figure 3, both power generation and exports were large components of the change in natural gas demand, with LNG exports being the largest—accounting for 37% of new gas demand over the past decade in the United States.

LNG export's share of U.S. natural gas demand is projected to grow in 2025 to about 15 Bcf/day, assuming the Plaquemines LNG project startup and expansions of existing facilities will have added approximately 3 Bcf/day. North American exports, which are predominantly sourced by U.S. natural gas supplies, are expected to double by 2030.⁴

Figure 3: Components of U.S. Natural Gas Demand

Decade Summary of U.S. Natural Gas Demand Changes (billion cubic feet per day)

From:	2015	2024	Change
<u>Domestic Consumption</u>			
Industrial, Residential, and Commercial	42.0	44.5	2.5
Transportation and Processing	6.3	9.0	2.7
Electric Power Generation	26.3	36.9	10.6
Total Domestic Demand (bcf/day)	74.6	90.4	15.8
<u>Exports</u>			
Via Pipelines	4.8	9.1	4.3
Via LNG	0.1	11.9	11.8
Total International Demand (bcf/day)	4.9	21.0	16.1

Source: U.S. Energy Information Administration⁵

Given that LNG projects are risky and capital-intensive, lenders have typically required long-term contracts to sell most of a project's capacity prior to funding its buildout. In the recent past, finding offtakers (i.e., long-term buyers) was not overly challenging for such projects because the value proposition (i.e., vast spread between feedgas costs and ultimate selling prices abroad after liquefaction, transportation, and regasification fees were deducted) that U.S. LNG exports offered was compellingly profitable to the offtaker. Conditions, however, have changed.

Diminishing Returns Going Forward

A downshift in domestic gas production plans and shifts in demand patterns jeopardize the LNG value proposition that depends on inexpensive feedgas. The notion that U.S. natural gas prices will remain depressed relative to international levels is in jeopardy for the following reasons:

- 1) U.S. oil and gas producers have prioritized capital discipline over volume growth since the COVID-19 slump.⁶
- 2) Mexico's demand for pipeline gas from the U.S. is high and continues to grow.⁷
- 3) Coal power plant retirements have created a greater dependency on natural gas-fired power generation in the U.S.⁸
- 4) New capacity of LNG under construction or in the late stages of planning and scheduled for production by 2030 will double the U.S. export capacity.⁹
- 5) The building out of data centers to support the growing demand for artificial intelligence has caused an uptick in the building out of natural gas power plants by utilities in the coming years to supply the additional electricity required by this shift.¹⁰
- 6) The invasion of Ukraine by Russia resulted in natural gas conservation efforts in many countries in Europe. This market development, along with Asian importers getting priced out of the market, has led to slowing demand in both regions in subsequent years.^{11,12}

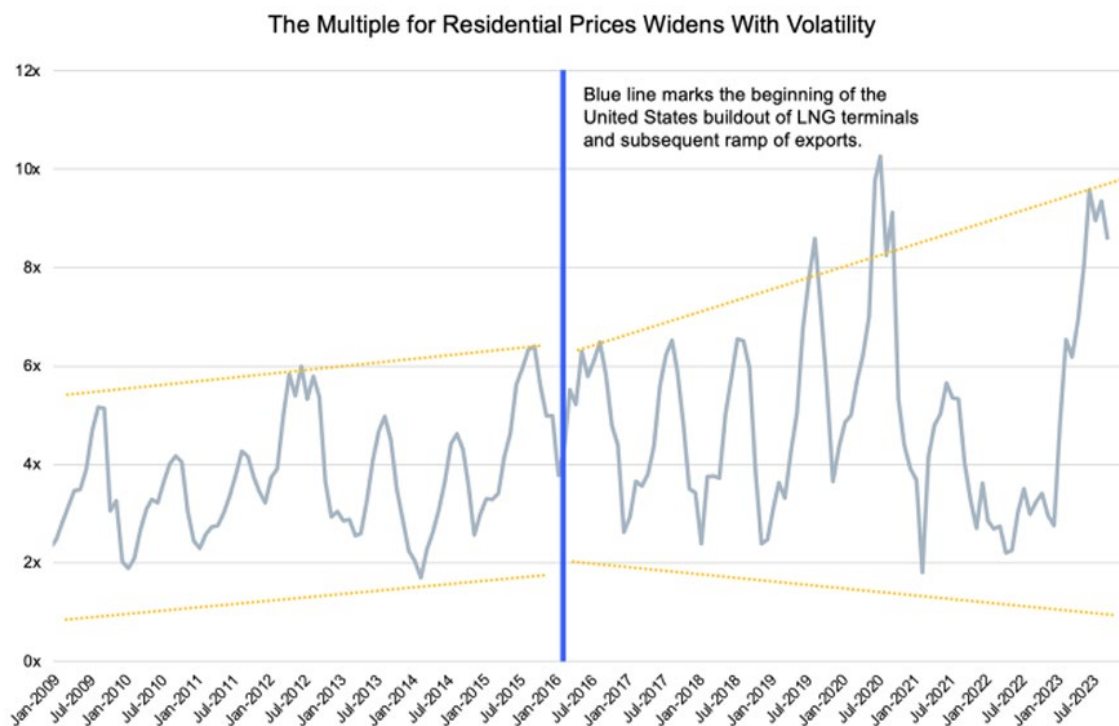
Growing competition for a resource tends to propel the resource's price higher. Conversely, declining competition (i.e., demand) should suppress prices. The characteristics of natural gas markets and future trends point to greater competition (higher prices) domestically and less competition (lower prices) internationally. The likely conclusion is that the spread between various natural gas markets will narrow as domestic prices approach international levels.

Under this changing paradigm, inking long-term contracts for the future sale of LNG grows increasingly more difficult. All these challenges to the U.S. LNG industry's economic model and value proposition suggest demand for new LNG capacity is lessening compared to previously projected assumptions.

Spillover effect of volatile wholesale prices

The expansion of liquefied natural gas (LNG) exports has increasingly intertwined United States natural gas markets with the volatility of global energy markets. For U.S. consumers, the result has been price spikes and heightened volatility in gas and electricity bills. Residential gas consumers in the U.S. have already seen the effects directly, with residential gas bills (see Figure 4) becoming volatile as the export boom advanced.¹³

Figure 4: U.S. Residential Natural Gas Prices as a Multiple of Wholesale Prices



Source: IEEFA, based on U.S. Energy Information Administration Data ¹⁴

Before the arrival of industrial-scale LNG exports, the gas markets of the contiguous U.S. states were physically isolated from global gas market volatility. Price disruptions in European or Asian gas markets had little to no effect on consumers in the United States. But the meteoric growth of LNG exports has now linked North American gas prices to the chaos of international gas markets. Today, a cold snap in China, a conflict in Europe, or a pipeline mishap anywhere else in the world has the potential to boost North American natural gas prices, subjecting North America's gas and electricity consumers to unexpected price shocks.¹⁵

Consumers saw this dynamic unfold to dramatic effect in 2021 and 2022. Starting in late 2021—in the runup to its invasion of Ukraine—Russia began to manipulate Europe’s energy markets, trimming pipeline gas shipments and emptying gas storage facilities on the continent.^{16, 17} European gas prices spiked amid the shortages. Many gas buyers on the continent ramped up their LNG purchases to backfill the missing fuel supplies. Europe’s gas market contagion quickly spread to Asia, where buyers from South Korea, Japan, and Taiwan entered a bidding war with Europe for the limited global supply of LNG. In both Europe and Asia, spot prices for gas soared to previously unimaginable highs.

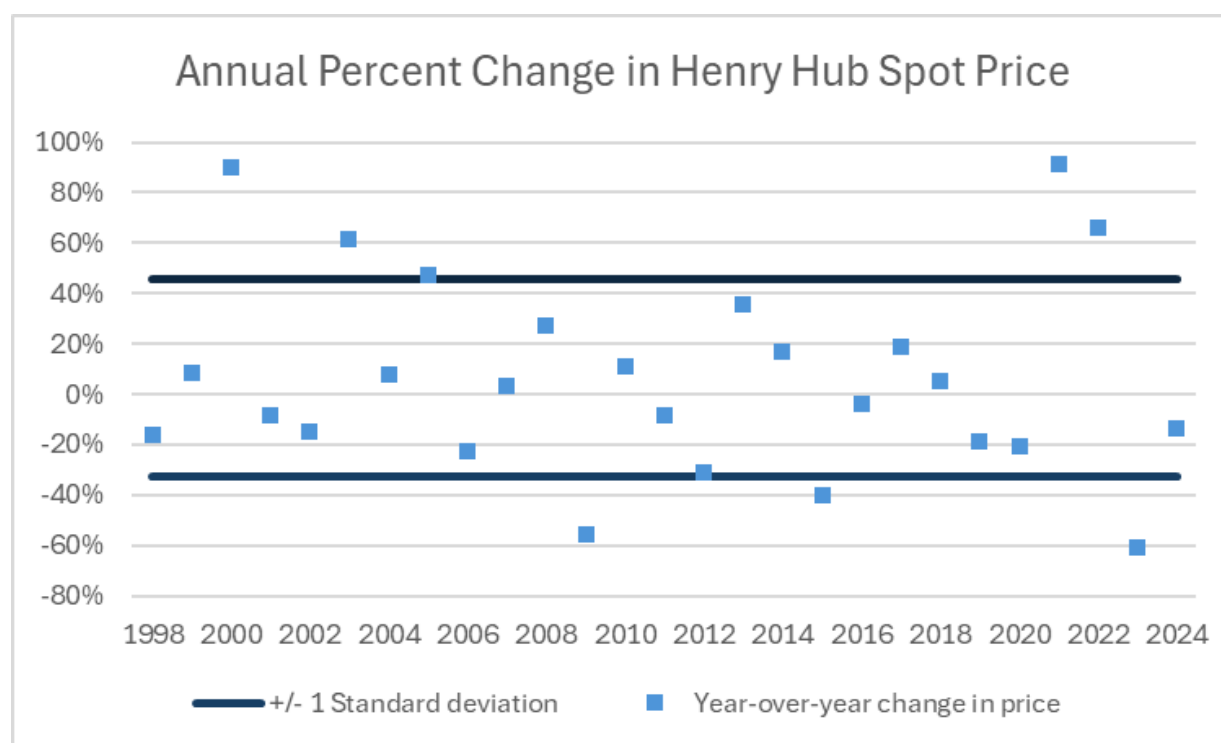
This price contagion spread to North America as well. As global LNG prices spiked, U.S. LNG exporters bought all the gas they could manage, hoping to reap outsized profits by selling U.S. gas into overheated global markets. Surging exports, in turn, shortchanged domestic gas supplies. As LNG exports rose, U.S. gas stockpiles fell to multi-year lows, and wholesale gas prices rocketed to their highest levels in more than a decade.^{18,19} The gas industry reaped record profits, largely at the expense of homes, businesses, and industries that paid higher fuel bills.²⁰

Long-term contracts are not necessarily a shield for uncertain prices

Domestic natural gas prices have exhibited significant year-to-year volatility from 1998 to 2024, with 74% of those years (20 out of 27) experiencing annual average price changes exceeding $\pm 10\%$. These gyrations are driven by sporadic and seasonal shocks to supply or demand from weather disruptions and natural disasters, geopolitical instability, environmental concerns, economic influences, and both planned and unplanned changes to supporting infrastructure.

The intensity of the price swings appears coupled with inelastic short-term responses to price signals by either producers or consumers of natural gas. The price movements have been severe of late, as three of the last four years have experienced average prices shifting by greater than one standard deviation, underscoring the market’s unpredictability.

Figure 5: Annual Average Change in Wholesale Prices



Source: U.S. Energy Information Administration²¹

Recent actions by Venture Global, a U.S. LNG exporter, highlight how gas and oil market volatility globally pose challenges to LNG exporter operations and their financial projections.²² Despite having most of its sales under long-term contract, which is supposed to be the financial bedrock of LNG export investments, Venture Global could not accurately project its 1Q25 financial drivers with just one month remaining in the quarter. In fact, the company was forced to lower its guidance for 2025 due to collapsing spreads between domestic and international prices for gas and LNG.²³

Conclusion

The build-out of U.S. LNG export industry does come with a cost: Natural gas consumers—whether industrial, residential, commercial or utilities—all face higher and more volatile energy prices because of the LNG buildout. Policymakers would be well advised to better factor in these costs that offset the benefits of additional international trade. At some point the arbitrage window closes between domestic and international gas prices and the law of diminishing returns takes full effect. Waiting until after the cycle is complete to acknowledge these risks is inconsistent with public interest.

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- ² *Ibid.*
- ³ EIA. [Coal may surpass natural gas as most common electricity fuel this winter](#). November 18, 2026.
- ⁴ EIA. [North America's LNG export capacity is on track to more than double by 2028](#). December 30, 2024.
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- ⁶ Federal Reserve Bank of Dallas. [Oil and gas industry shows discipline on capex, but risk remains](#). March 31, 2025.
- ⁷ Columbia| SIPA Center on Global Energy Policy. [Lucrative Reward or Mounting Risk? Mexico's Growing Reliance on US Gas](#). October 24, 2023.
- ⁸ Argus. [US coal demand to fall despite retirement shift](#). February 1, 2024.
- ⁹ U.S. Department of Energy. [Study: Energy, Economic, and Environmental Assessment of U.S. LNG Exports](#). December 17, 2024.
- ¹⁰ Datacenter Dynamics. [Welcome to Gas Land – how natural gas is powering the US AI boom](#). May 1, 2025.
- ¹¹ IEEFA. [EU combined gas and LNG imports fall due to reduced demand](#). April 30, 2025
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- ¹³ IEEFA. [U.S. Residential Gas Consumers Bear Brunt of LNG Exports](#). March 2024.
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- ¹⁷ Financial Times. [Gazprom's low gas storage levels fuel questions over Russia's supply to Europe](#). October 27, 2021.
- ¹⁸ EIA. [Weekly natural gas storage report](#). March 6, 2025.
- ¹⁹ EIA. [Natural Gas: Henry Hub Natural Gas Spot Price](#). Accessed March 12, 2025.
- ²⁰ IEEFA. [Gas exports cost U.S. consumers more than \\$100 billion over 16-month period](#). January 29, 2024.
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- ²² IEEFA. [LNG market volatility clouds Venture Global forecasts, even with long-term contracts in place](#). May 5, 2023.
- ²³ Venture Global. [Venture Global Reports First Quarter 2025 Results](#), May 13, 2025.