



The Honorable Jennifer Granholm Secretary, U.S. Department of Energy 1000 Independence Ave, S.W. Washington, DC 20585 February 16, 2022

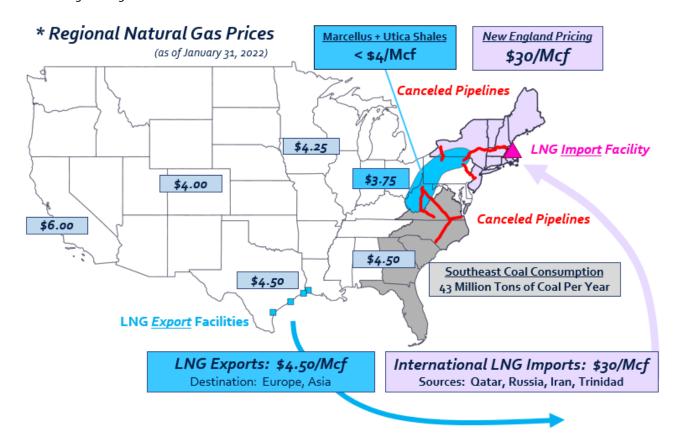
Dear Secretary Granholm-

I am writing to you in response to a recent letter from several U.S. Senators dated February 2, 2022 (the February 2nd Letter) wherein the signatories urged you to "take swift action to limit U.S. natural gas exports and examine their impact on domestic energy prices." The February 2nd Letter echoes a sentiment expressed by one of the signatories in a letter sent to several natural gas executives, including myself, in November 2021. My response thereto (the Response Letter) can be found here.

New England's "Canceling" of Natural Gas Infrastructure is the Cause of Recent Price Inflation

It is difficult to look past the fact that seven of the ten signatories to the February 2nd Letter hail from New England, as well as the timing of their letter. The weekend before the February 2nd Letter, natural gas pricing in New England reached levels that were among the highest in the world, approaching \$30/mcf. At the same time, prices in Pennsylvania (and most of the United States) were around \$5/mcf, below the 20-year average.

There is no need to "halt permit approvals of U.S. LNG export facilities" pending the conduct of "a review of LNG exports and their impact" on prices experienced by New Englanders. There is no active LNG export facility in New England, meaning there is no incremental demand from U.S. LNG in New England that would explain why it has prices over five times those of neighboring states.



American Natural Gas cannot physically flow to Eastern states due to pipeline cancelations

Canceled + Opposed Pipeline Projects

Project	Status	Gas Volumes (Bcfd)	Number of Homes it Would Have Served
Constitution	Canceled	0.7	2.5 Million
Penn East	Canceled	1.1	4.0 Million
Northern Access	Opposed	0.5	1.8 Million
Mountain Valley	Opposed	2.0	7.3 Million
Atlantic Coast	Canceled	1.5	5.5 Million
Northeast Direct	Canceled	1.2	4.4 Million
Total		7.0	25.5 Million

And it is not a question of domestic supply. We have ample resources, more than any other nation in the world¹, and well in excess of what would be needed to maintain the United States' leading position as the lowest-cost provider of natural gas for decades to come.

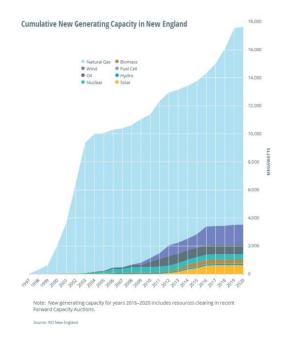
The problem is very straight forward: the pipelines heading to New England are full, and as a result, we cannot physically flow that gas needed to meet growing demand without more infrastructure. That's it.² And the way to solve this problem is equally straight forward: allow the completion of pipeline projects such as those in the table noted above, many of which are substantially complete, and let us provide the natural gas ... while also reducing New England's emissions.

The True Impact of the Infrastructure "Cancelation" Movement

What we are seeing play out in New England is the result of a symbolic attempt to address climate change by canceling pipelines, thereby isolating itself from domestic supply.

I say "symbolic" for a few reasons. At the time, it was argued that the natural gas that the pipelines would deliver was not necessary, and that lower emissions alternatives were all that was needed. In reality, though, since canceling the first natural gas pipeline that would have accessed New England, the consumption of natural gas by the region has increased, not decreased. The consequence has been that New England has had to look to foreign natural gas to meet its energy needs.

New England is the only region remaining in the United States that is importing LNG from foreign sources. Rather than relying on natural gas sourced from Appalachia with some of the lowest methane emissions and smallest carbon footprints on the planet, New England instead has to source foreign supply shipped from over 2,000 miles away. Not only has the cancelation movement resulted in New England's natural gas being the least responsibly-sourced with the highest emissions in the United States, it has also caused the region to be subject to international LNG pricing. This is the reason New Englanders are paying five times more for natural gas than their neighbors.



As used herein, references to U.S. natural resource are based on company analysis of economically recoverable reserves < \$4/mcf.

² https://www.iso-ne.com/about/what-we-do/in-depth/natural-gas-infrastructure-constraints

And this highlights the fallacy underlying the infrastructure "cancelation" movement: it has been nothing more than a reckless insertion of costly inefficiencies into the energy ecosystem, and an exportation of accountability for emissions. It has not resulted in emissions reductions. In reality, it has resulted in increased cost and emissions. And as such, it has had results directly counter to the stated goal of its proponents (and their financiers).³

Had New England allowed the construction of pipelines into its region, it would be consuming the same amount of natural gas that it is today, but without the exorbitant costs being borne by its citizens.⁴ Those savings could have gone towards investments in other decarbonization opportunities, such as renewables. Instead, New England is maxing out the consumption of other emissions-intensive power sources and importing foreign natural gas, both of which are worse for the environment. In fact, this winter, New England has had periods where approximately one-quarter of their electricity was sourced from burning oil,⁵ and throughout the year, 34% of New England residents burn oil to heat their homes.⁶ This energy mix, for which the pipeline cancelation movement is accountable, is comparable to what is seen in undeveloped countries, not the United States.

In the Southeast, the absence of accessible natural gas because of the cancelation movement is forcing the region to continue to consume coal. Coal power generation would have been the principal target for replacement had the Atlantic Coast Pipeline (canceled) or the Mountain Valley Pipeline (delayed) been constructed. Instead, because of the cancelation movement, we will continue to have tens of millions of tons of unneeded CO2e emitted per year.

A follower of the rhetoric may celebrate cancelation as a victory, but it is a Pyrrhic victory.

The Misguided "Solution" Would Increase New England's Prices

Which takes me to the proposed "solution" cited in the February 2nd Letter: limiting U.S. LNG to alleviate pricing.

I understand the political convenience of attacking U.S. LNG in a time of inflation and increased regional natural gas pricing. It is seen as a source of "extra" supply that can be targeted to answer the demand needs to reduce costs without the political inconvenience of having to support increased natural gas development.

The problem, however, is that limiting U.S. LNG export will do nothing to alleviate the natural gas pricing environment in New England for the very reasons stated above. If natural gas producers cannot deliver incremental volumes to New England from only 200 miles away due to a lack of pipeline infrastructure, neither can LNG cargoes docked in ports off the coast of Louisiana.

And ironically, <u>"tak[ing]</u> swift action to limit U.S. natural gas exports" would actually *increase* natural gas prices for New Englanders. By removing approximately 22% of supply from the global LNG market, the price for purchasers of global LNG such as New England would inherently increase, significantly.

³ This is not an argument that natural gas should grow in perpetuity, or that renewables are not a viable solution. It is more so an argument to highlight the shortcomings of the presumptions underpinning the "cancelation" movement, and the ramifications of those shortcomings. The "cancelation" movement rests on the presupposition that if supply of natural gas is blocked, renewables will immediately fill the demand void. This drastically overestimates the penetration rates of renewables seen to date, which have yet to grow at a rate that keeps pace with total energy demand growth. It also highlights the discrepancy between the full life-cycle costs of renewables and the common narrative suggesting renewables are currently cost-competitive with natural gas. New England should be a case study for those making this argument. If there were a readily available, lower-cost, lower emissions-intensive alternative capable of meeting New England's electricity needs, it would be the marginal cost of supply. But we are not there yet. We cannot make meaningful progress in addressing climate change if we sacrifice the available "good" for the not-yet-available "ideal." We can and should invest in renewables, but we also can and should invest in natural gas.

⁴ Cost is inherently a consideration in how to best address global climate change. Not only do costs flow back to American citizens, prioritizing lower cost decarbonization opportunities allows for savings to be deployed into additional decarbonization opportunities. As an example, due to the energy crisis currently playing out in Europe, which is principally the result of Europe's rapid transition away from traditional energy resources like natural gas, it is estimated that Europeans will spend approximately \$1 trillion this year on energy versus an average year of approximately \$500 billion. (https://www.bloomberg.com/news/articles/2022-01-12/europe-faces-1-trillion-energy-bill-this-year-citigroup-says) The difference – experienced in just one year – is roughly one quarter the total asserted cost of the Build Back Better Act.

⁵ https://www.forbes.com/sites/davidblackmon/2022/01/17/new-englands-clean-energy-transition-seems-heavy-on-fuel-oil/?sh=37232c9c7ee4

⁶ https://www.mass.gov/service-details/how-massachusetts-households-heat-their-homes

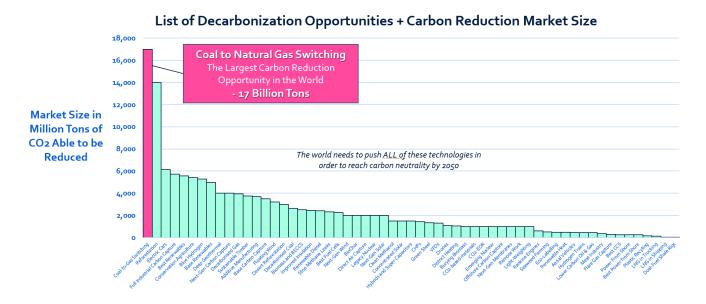
Like the pipeline cancelation movement, the U.S. LNG cancelation movement would be nothing more than the insertion of a costly inefficiency into our energy ecosystem resulting in consequences that are the exact opposite of the stated intent.

LNG is the Most Significant Decarbonization Opportunity for the United States to Influence Global Climate Change

To suggest limiting U.S. LNG at this time, however, is a political convenience taken too far. Not only will it not work, and not only is the request being made at a time when our allies are relying on U.S. LNG to counter Russian aggression, it is also severely detrimental to our collective efforts to address global climate change.

<u>Providing low-cost, reliable energy while simultaneously addressing global climate change requires solutions, not scapegoats.</u>

Natural gas replacing coal is a decarbonization opportunity, and a significant one, full stop. It is proven to be effective at scale, and it is actionable today. The more we can accomplish in the next decade by acting on available solutions such as coal-to-gas switching, the easier (and less costly to Americans) our efforts will be to address the balance of carbon reduction needs in the coming decades.⁷



Source: Thunder Said Energy, Data-set Limited to Sub-\$100/ton Opportunities

As demonstrated in the Response Letter, natural gas replacing coal has a 20-year track record of success, reducing emissions at a scale and speed unmatched by any other single renewable technology. To put things into context: <u>EQT alone directly contributed to approximately 5% of the total emissions reduction in the United States from 2005 to 2019</u>. The entire <u>U.S. solar industry was 6%</u>.8

Not only has coal-to-gas switching been the leading contributor to the world-leading emissions reduction experienced in the United States over the last fifteen years, our ability to leverage U.S. LNG as our primary weapon against global emissions is equally proven and impactful. Since the first installation of LNG export facilities in 2016, the

⁷ Of particular importance, as is relates to U.S. LNG and as explained in more detail in the Response Letter, "we" refers to the global "we," not the United States "we," the New England "we" or the Boston "we." Approximately 91% of coal consumption is international, requiring an international approach to coal-to-gas switching if we are to contribute in any meaningful way.

⁸ Calculated by applying relative contribution to emissions reductions impact of coal-to-gas switching and non-carbon renewables on power sector emissions. (https://www.eia.gov/environment/emissions/carbon/archive/2019/) For example, EQT represented approximately 10% of domestic production growth over the period, allowing for coal-to-gas switching that in total contributed to the total coal-to-gas switching of 525 million MTs of emissions reduction, or approximately 52.5 million MTs attributable to EQT. Percent of total emissions reduction calculated by dividing impact (53.5 million MTs) by total U.S. emissions reduction, inclusive of non-power sector emissions (970 million MTs).

decarbonization impact of the U.S. LNG export industry replacing international coal is greater than the impact of the of the entire U.S. solar industry over the fifteen-year period of 2005 to 2019. Its emissions reduction impact has been the equivalent of electrifying approximately 140 million cars. Our industry achieved this in the face of opposition from those that have erroneously believed that the best path to address global climate change was by pitting natural gas against other decarbonization opportunities.

And the natural gas industry can do more. Much more.

With Your Support and Leadership, the Natural Gas Industry Stands Ready to Deliver

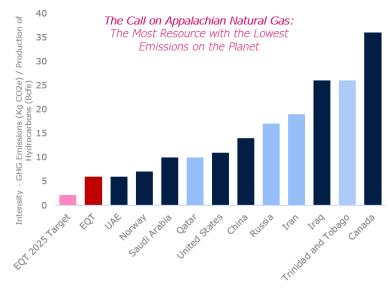
This is the real world that we are living in, and supporters of addressing climate change need to start being honest about this. No decarbonization opportunity, let alone the largest opportunity this country has available to it, should be opposed at a time when it is apparent that we are not making the progress that we as a world need to make. ¹⁰ It is not an "either/or" choice between decarbonization opportunities, it is an "all of the above" solution.

The recent events in New England, Europe and Asia clearly demonstrate where we stand in our journey to address climate change. We do not have decades at our disposal to pursue policies that are not grounded in reality at the expense of policies that are. We need to move quickly and with a focus on opportunities that will provide meaningful progress today. And in that world, if we look at things in an honest manner, it is clear that U.S. LNG has the potential to be the largest green initiative on the planet.

And for each argument against increasing natural gas supply here in the United States to facilitate international coal-to-gas switching, I will highlight the following: four countries hold roughly two-thirds of the world's natural gas resources. The United States has the most, followed by Russia, Iran and Qatar.

Just as a lack of sound policy grounded in reality has resulted in Trinidad and Tobago supplying natural gas to New England instead of Appalachia, so too will Russia, Iran and Qatar supply the rest of the world if we continue to limit U.S. LNG. And the results will be the same: increased emissions and increased cost to Americans, with an added consequence of enhanced geopolitical risk.

2020 EMISSIONS INTENSITY



Source: Rystad

⁹ Calculated using emissions reduction of coal-to-gas switching of approximately 30 million MTs per Bcf of natural gas supplied and 2.77 MTs per electrified car, as detailed in the Response Letter.

¹⁰ The contemplated halting of LNG exports would be as damaging to our path to net zero as eliminating 100% of wind, solar, and electric vehicle manufacturing in the United States.

Conclusion

The solution to addressing elevated regional natural gas pricing is simple: let us connect our low-cost, low-emissions supply to demand with the pipelines our industry has proposed. We are ready to deliver, but we need your support.

In the long-term, after we have addressed the costly inefficiencies in our domestic system that are (unnecessarily) being borne by American citizens, that infrastructure can be used to expand upon the foundation of our largest weapon in addressing global climate change – an amplified U.S. LNG program targeting international coal.

The United States has more natural gas resources than any other country in the world. As such, the responsibility of the United States to be a leader inherently requires a reasoned, apolitical approach to the role of natural gas in addressing global climate change.

Now is **not** the time to limit the U.S. natural gas industry and U.S. LNG, now is the time to unleash it.

Sincerely,

Toby Z. Rice

President and Chief Executive Officer