

To: Honorable Chair Rep. Jared Patterson, Chair,

Members, House Select Committee on Protecting Texas LNG Exports

Re: LNG "Pause" - Economic, Environmental and Other Impacts

From: Cyrus Reed, Legislative and Conservation Director, Lone Star Chapter, Sierra Club,

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Just the facts: The Pause Is Overdue

Hello my name is Cyrus Reed, and I am the Legislative and Conservation Director of the Lone Star Chapter of the Sierra Club, which is the state chapter of the Sierra Club. We have some 25,000 members in Texas, including many members in communities in which LNG export facilities operate or are proposed, including local groups in the Golden Triangle, Houston, Corpus Christi and Lower Rio Grande Valley. As an organization, many of our members have been concerned with both existing LNG export facilities, and the development of LNG facilities, and in some cases, we have actively opposed new gas export facilities for a variety of reasons, including their outsized role in fueling the climate crisis, local environmental impacts and the health impacts on local communities.

Earlier this year, the Biden Administration took a pause on issuing <u>NEW</u> DOE licenses for LNG export facilities. According to the Administration, the pause is intended to update the studies and data DOE uses when reviewing applications to export LNG to non-free trade agreement countries. It does not impact any LNG facilities that have already received their license, including those that have yet to be constructed. The Sierra Club as an organization has had grave concerns about the rushed licensing of dozens of LNG facilities over the last several years, and very much support the pause as we were concerned with what we viewed as a very imperfect review process that did not consider the full impacts of LNG export facilities on local communities, and our overall efforts to reduce the gasses that are creating our climate crisis and meet our obligations under the Paris Agreement. Thus, we support the pause, and have signed a letter from more than 100 organizations calling for a serious and updated review process for future LNG export facilities. The letter to Secretary Granholm and President Biden urges them to not only update the previous economic and environmental analyses that the Department of Energy (DOE) relies on for considering LNG export applications, but also to incorporate factors not currently analyzed like environmental justice.

The pause in LNG licenses is not a prohibition on new LNG facilities but instead a pause for the Administration to review its process, its data and the studies needed. The announcement in January was a culmination of more than a decade of work across communities along the Gulf Coast, and at the federal level, to oppose the buildout of gas exports. The DOE has never rejected a gas export application on the grounds of harm to the public interest despite clear and growing evidence that gas exports are inconsistent with **global climate targets**, destroy local communities and critical ecosystems, and **increase domestic energy costs**. Additionally, there are currently no restrictions on the destination for gas exports, which risks national security. This re-evaluation of public interest determination criteria, if done right, will stop the practice of rubber-stamping these projects.

Based on our analysis, we believe there are a total of 12 projects in the US and 2 terminals in Mexico that are waiting for DOE approval and can be affected by the Biden Administration pause. Collectively, the 12 projects in the US - which include two in Texas - the Corpus Christi LNG Midscale 8-9 and the Port Arthur LNG expansion - would have lifecycle emissions of over 830 MMT CO2e/year or the equivalent of 223 coal plants. The two terminals in Mexico that are on pause if built would generate enough carbon dioxide emissions to match an additional 35 average-sized coal plants.

The Pause is A Pause Not A Prohibition

While the pause does impact two proposed plants in Texas -at least temporarily - it does not impact other projects in Texas that have already received their DOE license, including Corpus Christi Stage III, Rio Grande LNG, Delfin LNG (offshore) and Texas LNG. While it is not certain whether all these LNG facilities will be built, the pause does not apply to these facilities.

Sited primarily in communities of color, proposed LNG export facilities perpetuate environmental injustice and harm to Gulf Coast communities that are already overburdened by industrial pollution from the fossil fuel industry as well as the effects of extreme weather like hurricanes, which are driven by climate change.

The Sierra Club and Frontline Communities are Demanding More Action than a Pause.. For Pause Sake

Frontline communities, individuals and organizations like the Sierra Club understand that many LNG facilities are already in operation and many other facilities have sought permits to operate in Texas, including those subject to the pause. But the current process of rubber stamping export facilities is not in the national interest and a much more robust process is needed that provides the public - including industry - the opportunity for input. Specifically, in the recent letter sent to the DOE, these communities are calling for:

- Incorporation of an environmental justice analysis into the public interest determination;
- When updating the DOE's economic studies, researchers must include analysis of the impacts on local economies.

- The economic factors that go into the public interest determination must take livelihoods and local economy into account.
- Fully accounting for greenhouse gas emissions and the historic contributions to our current climate crisis
- negative impacts on the health of our communities from LNG facilities should also be factored into the DOE studies
- Assessing the international impacts of increased greenhouse gas emissions from new and existing LNG export licenses, given recent global commitments at COP28 to "transition from fossil fuels," and United States' pledges to the UNFCCC's Paris Agreement.
- Incorporating the risk of explosions and leaks into the analysis. Risks are real and many communities like that in Freeport have experienced explosions firsthand.
- Opening a formal comment period in the process of updating your reports, and ensuring community voices get on the record.
- Creation of an Advisory Board or Task Force of frontline community members and empower that body to work with DOE to incorporate our experiences and knowledge into the public interest determination process, along with any new studies.
- Updating PHMSA LNG regulations, which has been postponed now for more than a year.

Shipping gas overseas increases the demand for gas and results in a higher cost of gas for Texans

Under supply and demand, shipping gas overseas means there is less supply to serve Texas. The increased demand overseas means in general costs go up, impacting millions of Texans who rely on gas for heating and cooking. While exporting gas may be helpful to the bottom line of some companies, it does not make it in the interests of everyday Texans.

If you want to claim gas is "clean," you must deal with methane leaks on the whole spectrum

Methane leaks along the entire LNG life cycle impacts communities from the Permian Basin and Eagle Ford Shale to Brownsville and Port Arthur. Every step of the way — from extraction by fracking, to transport by pipeline, to energy-intensive liquefaction — LNG projects release significant amounts of methane, a greenhouse gas that is more than 80 times more powerful than carbon dioxide over a 20-year period — representing a major contributor to climate change. No state releases more methane from oil and gas production than Texas. Methane pollution - and associated gasses - is also known to cause asthma, respiratory diseases, heart disease, preterm births, and cancer.

Much of the difference in opinion between the Sierra Club and many industry-led groups that favor expansion of LNG facilities revolves around the climate impact of gas exports. While pro-LNG groups focus only on emissions from the facility, or potential gains comparing LNG burned overseas for electricity versus electricity generated by existing coal, Sierra Club focuses

on the full lifecycle of the LNG facilities. LNG facilities are not just the facilities themselves built along the Texas and Louisiana coasts, but involve gas production wells, processing plants, hundreds of miles of pipelines, the LNG facility, the ships to take the LNG and the infrastructure overseas to ultimately burn LNG for either electricity or vehicles. Sierra Club also considers the renewable energy development displaced by continued use of gas at home and abroad, not just an outdated comparison with coal.

Sierra Club believes that the oil and gas industry must make major efforts to reduce the leaks, flaring and venting of massive amounts of methane. Recently, in a rulemaking supported by the Sierra Club, the US EPA issued a final methane rule, which will require major investments by oil and gas companies to lower their emissions. Methane emissions from the oil and gas industry in Texas have continued to rise as oil and gas have expanded, and information indicates that emissions in the Permian Basin have been twice the amount from New Mexico, which has state-level methane control regulations in place.

Under the new methane rule, states like Texas will have two years to develop a State Implementation Plan to reduce their methane emissions from the oil and gas industry. Cleaning up the oil and gas industry upstream will improve the opportunity to make gas a cleaner energy source than it is today. Unfortunately, rather than embrace this change, the State of Texas, through the Attorney General's Office, acting on behalf of the TCEQ and the Railroad Commission of Texas, is choosing to fight the new regulation rather than implement it in a way that reduce emissions, reduce health costs, and ultimately keep the product in pipes and for end uses, rather than in our atmosphere.

Oil and Gas Production and Exports are Higher than they have ever been

Despite some political rhetoric about the Biden Administration shutting down oil and gas in Texas, the fact is that oil and gas production in Texas has never been higher. Recently the Railroad Commission of Texas published its annual data which found that for both oil and gas, 2023 was a record year. In particular, the RRC found that oil production hit a record **1.92 billion barrels** in 2023, which was 51 million barrels more than the previous record; while Operators produced **12.01 trillion cubic feet** of gas in 2023, beating the previous record by more than 13%. In fact, for gas, the last three years represent the top 3 production years in the history of Texas, with all three years topping 10.5 trillion cubic feet of gas.

Indeed, part of this production is feeding the LNG frenzy that has occurred in just a few short years. As of early 2024, the United States was the No. 1 exporter of LNG in the world. This is with nine facilities currently operating in the U.S. Yet the fossil fuel industry is in the process of building or planning to build or expand more than 35 export facilities – mostly in the Gulf Coast – that would lock in devastating levels of pollution for a generation. We can not address the climate crisis while locking in decades of additional growth in LNG facilities and the pause is a needed break from this unfettered growth. The proposed LNG buildout would lock in this pollution – and its consequences – for an entire generation and far exceeds global gas demand now or projections into the future.

Frontline Communities have suffered for years from accidents, emissions and loss of important space

Many of the communities where LNG corporations want to build are already suffering low access to health care and residents experience disproportionate poor health. Workers and neighbors do not need more pollution to exacerbate existing health issues.

In communities with existing LNG facilities, in fact, communities have already suffered. As an example, in June 2022, a 450-foot-high explosion at the Freeport LNG Liquefaction Facility terrified the local community and caused the facility to shut down for over six months. The explosion's aftermath led to excess carbon monoxide, nitrous oxides, and other particulate matter emissions. The Pipeline and Hazardous Materials Safety Administration (PHMSA) blamed the incident on inadequate operating and testing procedures made by human error. Residents expressed their disappointment at the explosion's aftermath and questioned the current regulations in place over the facility in a public meeting at the beginning of February 2023. There have been no changes to the regulations that govern gas export projects in over 40 years. In December 2023, Freeport LNG settled with the EPA over safety failures for the June 2022 Texas blast. The settlement included a civil penalty of \$163,054 for breaking chemical accident prevention rules under the Clean Air Act.

In February 2023, FERC granted permission for the plant to restart partially. U.S. regulators are currently evaluating the facility's request to resume entire commercial operations despite concern from local residents. The Sierra Club challenged the extension, arguing that Freeport LNG failed to abide by its own timeline. Ultimately, the FERC approved Freeport LNG's request to return its plant to full operation in the fall of 2023.

In Corpus Christi, Corpus Christi Liquefaction, a subsidiary of Cheniere Energy, operates the Corpus Christi LNG terminal, which holds three liquefaction trains <u>capable of processing</u> 15 million metric tons of LNG annually. The facility <u>currently emits</u> 91 MMT of CO2e per year.

Since the facility started operating in 2018, it has <u>exceeded its permitted limits</u> for emissions of pollutants hundreds of times. Rather than penalizing Cheniere, the TCEQ has increased the plant's pollution limits. The facility can now emit double the limit set in the original permit.

In addition, to build LNG terminals, companies often have to bulldoze wetlands to make room for the concrete, asphalt, and steel that makes up the facility. In Brownsville, one of the last untouched natural areas of the Texas coastline, essential wetlands are already being destroyed to make way for Rio Grande LNG. These wetlands have provided habitat for important coastal wildlife and some endangered species for generations. They also provide important protective functions against hurricanes. Destroying wetlands is bad for wildlife and the climate change resiliency of these communities.

Here in the Port Arthur area, LNG proposals by several entities could devastate the very wetlands that serve as important birding and tourist attractions, while also destroying the very habitats that help protect the area from flooding during hurricanes or high wind events. In essence, LNG export facilities and the gas they transport will exacerbate climate change, leading to stronger hurricanes, while they destroy the very wetlands needed to protect us from those climate extremes.

Our water is stressed and LNG requires more water

The construction of LNG facilities uses <u>immense quantities of water</u>. The sourcing of fracked gas to make LNG also uses an extreme amount of water, as does the normal day-to-day operations of an export terminal. With Texas facing immense pressure on its water supplies and real scarcity concerns throughout Texas, planning for additional LNG facilities and export terminals creates a threat to the need for water for other water uses - from agriculture to domestic use to inflow - and the environment. Any expansion of LNG facilities in Texas by its nature must involve the water planning process. Sierra Club is very concerned that this immense water use will undermine the real needs of communities for water to grow in a more sustainable manner. Given water needs, it is not the highest priority to provide freshwater for LNG facilities and terminals that are intended to export a Texas product, not for our own use.

Our Grid is stressed and LNG facilities create more need for transmission, raising bills

All of you are well aware that the ERCOT grid has been stressed. From Winter Storm Uri, to a series of record demands in the last few years in winter and summer, to high congestion costs as we have failed to build out transmission, Texans are worried about the reliability of our grid. LNG facilities require massive amounts of electricity but also in many cases require new transmission, which in ERCOT is a socialized cost paid by all. In recent years, AEP Texas, the major utility in South Texas, has made a number of proposals through the ERCOT and PUCT process that will build out transmission lines in areas of Corpus Christi and the Lower Rio Grande Valley. Part of the reason for this build out are new LNG facilities. ERCOT customers both small and large will pay for these transmission upgrades. Again, the Sierra Club recognizes and supports the buildout of many transmission lines, but building out transmission for export facilities and then socializing those costs has a real impact on our communities.

Conclusions and Recommendations

The Sierra Club supports the pause on LNG permitting the Biden Administration has put in place and has called on the DOE to take specific steps to assure robust public input into the review process. We do not believe the present DOE licensing process, which has in many cases served to rubberstamp projects, has been in the public or Texas's interests. As our written testimony makes clear, we support the demands of frontline communities to have the local impacts to economies and habitats, risk for pollution and explosions, cumulative impacts and life-cycle climate change impacts to be more fully considered. In short, DOE should take the time needed and do a thorough analysis and transparent and participatory public process.

We also want to make clear that existing LNG export facilities have already negatively impacted local communities.

In terms of the state of Texas, we call on our leaders to stop fighting every proposed effort or EPA rule that is intended to better protect our communities from pollution. In particular, rather than fighting the pause, Texas should work on our transmission grid planning, water planning and flood control planning to be prepared for the industrialization that has already come to our coast. We must balance the need for these resources for industry with the need to assure adequate water, flood control - which includes habitat - and electricity for our communities.

If we truly want to make gas a cleaner resource, the State should develop through the TCEQ and RRC a State Implementation Plan to implement the new Biden methane rule, and continue to utilize federal dollars to plug orphan wells, and bring new technology into the oil and gas patch to lower emissions.... It is important to note that the State of Texas, because of your actions, has increased funding and programs to help oil and gas companies and third parties decrease emissions and flaring through the Texas Emissions Reduction Program through legislation by Rep. Landgraf that we very much supported. Texas has the know-how to make a real commitment to reduce pollution through both incentives, federal funding and regulation and rather than fighting these needed improvements we should embrace the challenge.

In addition, for years, our communities have been demanding a more responsive TCEQ on writing more restrictive permits, enforcing permit limits and considering public input in the permitting process. The recent experience in Corpus Christi where TCEQ chose to simply double Cheniere's permit limits rather than enforce its existing permit is a prime example. In addition, Texas has, we believe, ignored the need to consider and assess cumulative impacts on major air quality permits as required by federal law. We call on specific attention by TCEQ to the permitting of LNG export facilities, and more frequent inspections of these facilities. The recent explosion in Freeport LNG is an example of how close we can come to a disaster, and better monitoring and enforcement is sorely needed.

Communities want to see expanded air quality monitoring as well, particularly fenceline monitoring. To the extent that additional LNG facilities are built in Texas, areas that are located near neighborhoods that could suffer from direct pollution or any accident should be avoided, as should wetlands important for local economies, tourism, wildlife and flood mitigation.

Still, building additional LNG facilities and terminals is not in Texas's interests and we would be better off transitioning to other forms of energy that can be produced right here in Texas, including geothermal, solar, wind, battery storage and even off-shore wind. The U.S. recently joined nations from around the world in approving new climate goals which promise to "transition away" from fossil fuels. The expansion of the LNG exports, which will lock the planet into decades more reliance on methane gas, is incompatible with this goal.