Port Arthur LNG, LLC: Application)	FE Docket No. 15-96-LNG
To Amend Application for Long-Term,)	
Multi-Contract Authorization To)	
Export Liquefied Natural Gas To)	
Non-Free Trade Agreement Nations)	

NOTICE OF INTERVENTION, PROTEST AND COMMENT

The application seeks to increase the volume of LNG for which Port Arthur LNG, LLC (Port Arthur) requests export authorization for the equivalent of 698 billion cubic feet per year (Bcf/y) of natural gas. The U.S. Department of Energy (DOE) has not yet issued a final order on the pending application.

Executive Summary

The DOE and the applicant have not demonstrated that the application to export LNG to non-free trade agreement (NFTA) countries is consistent with the public interest under the Natural Gas Act (NGA) and should therefore be denied. The DOE has already approved a cumulative volume equal to over 30 percent of 2018 demand.

If the DOE mismanages and approves high volumes of LNG exports, and U.S. manufacturers lose their competitive advantage, it puts trillions of dollars of manufacturing assets at risk, a sector with over 12.5 million high paying jobs. According to the U.S. Bureau of Labor Statistics (BLS), the oil and gas industry had only 415.1 thousand jobs in 2018 or 3.3 percent of that of the manufacturing sector. This means that even if oil and gas jobs doubled due to LNG exports, the gain in jobs would pale in comparison of what would be lost in the manufacturing sector.

The NGA requires that shipments to NFTA countries must not be inconsistent with the public interest. Every U.S. DOE LNG export study shows that the public does not benefit from LNG exports and in fact, are damaged by them. Instead of considering the negative impact to the public, the DOE has focused on "economic net benefit" and markets. NFTA countries are the largest buyers of LNG and it is NFTA countries that discriminate against the importation of U.S. manufacturing goods and farm products.

Figure 1 on page 5 was taken from the DOE report entitled, "Macroeconomic Impacts of LNG Exports from the United States," and illustrates that LNG exports create winners and losers. Natural gas producers and exporters are the winners and everyone else in the U.S. economy are losers, clearly illustrating that LNG exports are not in the public interest. Figure 1 makes clear that LNG exports are in the interest of the natural gas producer and LNG exporter, a small and narrow portion of the U.S. economy, and not in the interest of the public.

The DOE's interpretation and use of public interest is inconsistent with the Administration's own use and understanding of the words *public interest*. On March 24, 2019, U.S. Attorney General William Barr submitted his summary of "The Special

Counsel's Report¹ to Congress." Attorney General Barr says, "Although my review is ongoing, I believe that it is in the *public interest* to describe the report and to summarize the principal conclusions reach by the Special Counsel and the results of his investigation." His use of *public interest* in this important document is not misunderstood by anyone. The public interest is about people. It is not about the *net economic benefit* nor *markets*. To be in the public interest means it benefits the public. As stated above, LNG exports do not benefit the public. This is a core legal vulnerability for the DOE and LNG export applicants.

DOE's public interest determination and the DOE LNG export studies have failed to address key fundamental economic risks and costs to consumers and the economy long-term.

- a. The global LNG market is not a free market² and buyers of LNG who will compete for natural gas on the basis of price with U.S. consumers are state-owned enterprises (SOEs) and foreign government-controlled utilities with automatic cost pass-through. Their sole mission is to ensure their country has sufficient natural gas supplies and they have the ability to pay any price, no matter how high to secure it. When global LNG demand exceeds global supply, these entities have market power to buy natural gas at any price necessary to keep their countries operating. Eighty-eight percent of all LNG consuming countries have winter when we do, which means their winter demand will drive up U.S. natural gas and electricity prices. Price spikes and volatility will increase. Because the global LNG market is not a free market, it is prudent and in the public interest to limit exports of LNG.
- b. Today's U.S. natural gas market price is delinked from global markets and pricing impacts and it is for this reason the U.S. consumer is benefiting from lower prices. Lower prices have resulted in significant investment and good paying jobs in the manufacturing sector across the country. As U.S. LNG exports grow, the low U.S. natural gas price (Henry Hub \$3 MMBtu) will become connected to the high global LNG prices (Asia \$12 MMBtu), which increases the marginal price, increasing both natural gas and electricity prices for the entire U.S. market.

This is what has happened in Australia. The Australian example shows that using *market determined* levels of LNG exports is not in the public interest. Australia started exporting LNG in 1989 and has 70.65 MTPA of capacity operating and 16.95 MTPA under construction. Like the U.S., Australia has vast natural gas resources with growing production. Historically the consumer prices have been around \$3.00 MMBtu. Now, because of LNG exports, the Australian consumer pays the *Asian LNG net back price*. This means that the Australian consumer pays the high Asian LNG price, less

² "WoodMac: Uncontracted demand by world's seven largest LNG buyers to quadruple," LNG World News, December 13, 2018, <a href="https://www.lngworldnews.com/woodmac-uncontracted-demand-by-worlds-seven-largest-lng-buyers-to-quadruple/?utm_source=emark&utm_medium=email&utm_campaign=daily-update-lng-world-news-2018-12-14&uid=55872

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¹ Attorney General Barr, The Special Counsel's Report, March 24, 2019 https://judiciary.house.gov/sites/democrats.judiciary.house.gov/files/documents/AG%20March%2024%202019%20Letter%20to%20House%20and%20Senate%20Judiciary%20Committees.pdf

transportation and liquefaction costs, which has resulted in Australian domestic consumer prices at \$8, \$9, and \$10 MMBtu. The net result is that the companies who own the nine operating LNG export terminals set the price for every Australian citizen, rather than the supply and demand of the Australian natural gas market. The Australian domestic market is no longer a free market and they no longer benefit from their vast natural gas resources.

The Australian Competition and Consumer Commission started publishing LNG netback prices in order to boost price transparency.³ The Australian consumer net back prices have increased from 7.27 Gj in 2017 to 10.69 Gj YTD 2018, a 47 percent increase. In approving LNG export terminals, the Australian government let markets determine the volume of exports, which has now directly caused disastrous impacts to consumers and the manufacturing sector as jobs continue to decrease.

A second example of this point is crude oil. U.S. crude oil prices are connected to the global market price. If global crude oil prices rise, so does U.S. gasoline prices. A direct cause and effect. This means that the U.S. consumer is not benefiting from U.S. crude oil resources and production. The same will happen to natural gas.

- c. The DOE failed to consider existing and future limitations in natural gas pipeline and storage infrastructure capacity and maximum deliverability capacity needed to supply the U.S. market at peak demand and export LNG. All DOE reports assume that pipeline and storage capacity will be available despite the fact that constraints already exist and the ability to build-out new capacity is threatened by multiple legal and public opposition headwinds. U.S. manufacturers already face higher basis point prices. LNG exporters are locking up pipeline capacity which limits availability for consumers.
- d. The DOE LNG export studies lack integrity and cannot be trusted because they use proprietary economic models that are not reproducible. One can only assume that this was done so that no one can challenge the findings. This is a breach of faith in our federal government. The DOE decided that the Data Quality Act (DQA), a law designed to increase transparency in public policymaking does not apply to them.
- DOE failed to consider that although the U.S. may be the largest producer of natural gas in the world, the U.S. is also the largest consumer. When natural gas resources are compared to total domestic and export demand, the U.S. has the lowest ratio of resources to consumption as compared to any country in the world. For example, using EIA's AEO 2019 cumulative average demand to 2050, the U.S. has only 57 years of supply. Total domestic and export demand is growing faster than resource growth.

³ "Australian watchdog starts LNG netback price publication," October 2018, LNG World News https://www.lngworldnews.com/australian-watchdog-starts-lng-netback-pricepublication/?utm source=emark&utm medium=email&utm campaign=daily-update-lng-world-news-2018-10-05&uid=55872

I. Industrial Energy Consumers of America (IECA)

IECA is a nonpartisan association of leading manufacturing companies with \$1.0 trillion in annual sales and with more than 1.7 million employees. It is an organization created to promote the interests of manufacturing companies through advocacy and collaboration for which the availability, use and cost of energy, power or feedstock play a significant role in their ability to compete in domestic and world markets. IECA membership represents a diverse set of industries including: chemicals, plastics, steel, iron ore, aluminum, paper, food processing, fertilizer, insulation, glass, industrial gases, pharmaceutical, building products, automotive, brewing, independent oil refining, and cement.

II. The Natural Gas Act (NGA) requires that shipments to NFTA countries must not be inconsistent with the public interest. A U.S. Government Accountability Office (GAO) report⁴ makes clear that neither Congress nor the DOE has ever defined the "public interest." DOE is using guidelines developed in 1984 for LNG imports to inform LNG export public interest decisions.

The GAO report entitled, "Federal Approval Process for Liquefied Natural Gas Exports," dated September 2014 includes the following statement on page 11.

In passing the NGA, Congress did not define "public interest;" however, in 1984, the DOE developed policy guidelines establishing criteria that the agency uses to evaluate applications for natural gas imports. The guidelines stipulate that, among other things, the market, not the government, should determine the price and other contract terms of imported natural gas. In 1999, DOE began applying these guidelines to natural gas exports.

In 1984, LNG imports were needed and they reduced risks for domestic consumers and manufacturers. Imports of LNG were in the public interest. LNG exports increase risk and especially market-determined LNG export levels by increasing consumer prices and reliability risks. Therefore, criteria used for decision-making in 1984 on LNG imports are inconsistent with what Congress had intended under the NGA, and should not be used to inform decision-making on LNG exports.

There is an explicit intent of Congress, in their asserting the requirement that LNG exports to non-free trade agreement (NFTA) countries must not be inconsistent with the public interest. And importantly, they were referring to cumulative LNG export volumes, not incremental volumes. When Congress passed the NGA and included the abovementioned public interest provision, there is no mention of 'markets' as a predicate for determining levels of exports, nor net economic benefit.

The U.S. Supreme Court has stated that "in order to give content and meaning to the words 'public interest' as used in the Federal Power and Natural Gas Acts, it is necessary to look to the purposes for which the Acts were adopted. In the case of the Power and

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⁴ "Federal Approval Process for Liquefied Natural Gas Exports," U.S. Government Accountability Office (GAO), September 2014.

Gas Acts it is clear that the principal purpose of those Acts was to encourage the orderly development of plentiful supplies of electricity and natural gas at reasonable prices." Furthermore, the Court also stated that the "primary aim" of the NGA is "to protect consumers against exploitation at the hands of natural gas companies." LNG exports exploit U.S. consumers when low domestic prices rise due to high global LNG demand.

The DOE's interpretation and use of public interest is inconsistent with the Administration's own use and understanding of the words *public interest*. On March 24, 2019, U.S. Attorney General Barr submitted his summary of 'The Special Counsel's Report⁷ to Congress. Attorney General Barr says, "Although my review is ongoing, I believe that it is in the *public interest* to describe the report and to summarize the principal conclusions reach by the Special Counsel and the results of his investigation." His use of *public interest* in this important document is not misunderstood by anyone. The public interest is about people. It is not about *net economic benefit* nor *markets*. To be in the public interest means it is to the benefit of the public. As stated above, LNG exports do not benefit the public. This is a core legal vulnerability for the DOE and LNG export applicants.

To this point, the DOE report, "Microeconomic Impacts of LNG Exports from the United States" illustrates how natural gas companies exploit U.S. consumers by exporting LNG. You will note from Figure 1 below that the only entities that benefit from LNG exports are producers and exporters of natural gas. Everyone else is negatively impacted. The public loses. Natural gas costs increase, wages decrease, capital investment decreases, especially in manufacturing, and there is a reduction in indirect economic income.

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⁵ NAACP v. Fed. Power Comm'n, 425 U.S. 662, 669-70 (1976).

⁶ FPC v. Hope Gas Co., 320 U. S. 591, 610 (1944).

⁷ Attorney General Barr, The Special Counsel's Report, March 24, 2019 https://judiciary.house.gov/sites/democrats.judiciary.house.gov/files/documents/AG%20March%2024%202 https://judiciary.house.gov/sites/democrats.judiciary.house.gov/files/documents/AG%20March%2024%202 https://judiciary.house.gov/sites/democrats.judiciary.house.gov/files/documents/AG%20March%2024%202 https://judiciary.house.gov/sites/documents/AG%20March%2024%202 https://judiciary.house.gov/sites/documents/AG%20March%2024%202 <a href="https://judiciary.house.gov/sites/documents/AG%20March%2024%202 <a href="https://judiciary.house.gov/sites/documents/AG%20March%2024%202 <a hre

Figure 1 All Economic Benefits go to **Gas Producers and Exporters** Figure 3: Change in Income Components and Total GDP in USREF_SD_HR (Billions of 2010S) 50 40 30 20 Billions of 2010 S 10 -10 -20 -30 -40 -50 Resource Income Net Transfers Net Change in GDF Source: DOE report on "Macroeconomic Impacts of LNG Exports from the United States," page 8

U.S. consumers are benefiting by a U.S. natural gas market that is a free market - whereby domestic demand versus domestic supply is resulting is low relative natural gas prices. And, U.S. consumers are benefiting from our vast natural gas resources.

Why markets cannot and should not be used to justify levels of specific LNG export applications volumes like this one, or cumulative volumes of LNG exports is illustrated today with U.S. crude oil and gasoline prices. U.S. crude oil prices are connected to the global market. If global market prices increase, so does U.S. gasoline, fuel oil, and jet fuel prices. Global demand from other countries are dictating demand and price versus the U.S. supply and demand. The net result is that the U.S. consumer is NOT benefiting from our vast crude oil resources. This can and will happen to natural gas if our low natural gas prices are connected to the high price of global LNG markets. It is it for this reason that connecting the low U.S. price of natural gas to the high global market price is NOT in the public interest.

What happened in Australia is another real time example that using markets to determine levels of LNG exports is not in the public interest. Australia has vast natural gas resources. Historically the consumer prices have been around \$3 MMBtu. Now, because of LNG exports, the Australian consumer pays the Asian LNG net back price. This means that the Australian consumer pays the high Asian LNG price less transportation and liquefaction costs, which has resulted in Australian domestic consumer prices at \$8, \$9 and \$10 MMBtu.

In fact, the Australian Competition and Consumer Commission started publication of LNG netback prices in order to boost price transparency. The story highlights that the Australian consumer net back prices have increased from 7.27 Gj in 2017 to 10.69 Gj YTD 2018, a 47 percent increase. In approving LNG export terminals, the Australian government let markets determine the volume of exports. A disastrous impact to their consumers and manufacturing sector as jobs continue to decrease.

The DOE study entitled, "Macroeconomic Outcomes of Market Determined Levels of U.S. LNG Exports" illustrates that LNG exports would substantially increase U.S. natural prices. Page 54 of the reports states that "for all the reference supply scenarios in the more likely range, natural gas prices could be from \$5.00 to \$6.50 per MMBtu in 2040. These mid-range scenarios have a combined probability of 47%." This is the highest probability the study gave any scenario. Since today's Henry Hub price is roughly \$3.00 MMBtu, the study confirms that natural gas prices could more than double causing domestic natural gas prices to rise to a level which would harm energy-dependent manufacturers and every homeowner. Consumers do not have an alternative. This is clearly not in the public interest.

There is all pain and no benefit for the public. The DOE report confirms that market determined U.S. LNG exports will connect U.S. prices to higher global LNG prices. The DOE report says that LNG exports will reduce the price that Asian countries pay and increase U.S. prices and eventually our prices will reach parity with Asia. At that point, the U.S. will have lost its competitive advantage. The report is explicit in highlighting the economic damage to especially manufacturing companies who are large users of natural gas. Importantly, manufacturers will have lost their competitive advantage, with very serious long-term implications for a viable manufacturing sector, jobs, and investment.

IECA urges the DOE to pause approvals of export applications and conduct a rulemaking to define the public interest for LNG exports to NFTA countries before giving consideration to this and future application to export. The DOE should not give final approval to any LNG export application without having established the definition and evaluated the cumulative impact to the public interest. LNG volumes that connect low U.S. natural gas prices to high global LNG prices long term cannot possibly be in the public interest.

III.DOE has not addressed vital short- and long-term risks to consumers and the economy that are core issues in considering whether an LNG export application is consistent with the public interest.

⁸ Australian Competition and Consumer Commission started publication of LNG netback prices in order to boost transparency. October, 2018. LNG World News https://www.lngworldnews.com/australian-watchdog-starts-lng-netback-price-

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⁹ "Macroeconomic Outcomes of Market Determined Levels of U.S. LNG Export," U.S. Department of Energy (DOE), June 7, 2018,

 $[\]frac{https://www.energy.gov/sites/prod/files/2018/06/f52/Macroeconomic\%20LNG\%20Export\%20Study\%202018.pdf.$

a. DOE failed to consider that the global LNG market is not a free market and that LNG buyers are SOEs and foreign country utilities that have buying market power.

The global LNG market is not a free market ¹⁰ and buyers of LNG who will compete for natural gas on the basis of price with U.S. consumers are SOEs and foreign government-controlled utilities with automatic cost pass-through. Their sole mission is to ensure their country has sufficient supplies and they have the ability to pay any price, no matter how high to secure natural gas supplies. When global LNG demand exceeds global supply, these entities have *market power* to buy natural gas at any price necessary to keep their countries operating. Eighty eight percent of all LNG consuming countries have winter when we do, which means their winter demand will drive up U.S. natural gas and electricity prices. Price spikes and volatility increases.

b. DOE failed to consider pipeline and storage capacity risk constraints (and at peak demand), and their cost and reliability impact.

DOE failed to consider existing and future limitations in natural gas pipeline and storage infrastructure capacity and maximum deliverability capacity needed to supply the U.S. market at peak demand and export LNG. All DOE reports assume that pipeline and storage capacity will be adequate despite the fact that constraints already exist and the ability to build-out new capacity is threatened by multiple legal and public opposition headwinds.

Today, gas marketers and industrial companies have difficulty securing capacity on pipelines because gas producers have locked in firm capacity and there is no excess capacity for manufacturing companies. We cannot grow our facilities without increased pipeline capacity.

c. DOE's failure to consider infrastructure pipeline deliverability and storage limitations is inconsistent with the President Trump's concern for reliability and resiliency of the electric grid.

Approving more applications to export is getting the cart before the horse. The DOE Electricity Office is doing the right thing examining vulnerability of the pipeline infrastructure. Studies are underway that will confirm what everyone already knows is that there are existing pipeline capacity problems.

d. Failure to address cumulative demand versus natural gas resources.

A comparison of the U.S. Energy Information Administration's (EIA) AEO 2019 cumulative demand through 2050 to EIA's estimates of technically recoverable natural gas resources in the lower 48 shows that this demand would consume 58 percent of all

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¹⁰ "WoodMac: Uncontracted demand by world's seven largest LNG buyers to quadruple," LNG World News, December 13, 2018, <a href="https://www.lngworldnews.com/woodmac-uncontracted-demand-by-worlds-seven-largest-lng-buyers-to-quadruple/?utm_source=emark&utm_medium=email&utm_campaign=daily-update-lng-world-news-2018-12-14&uid=55872

resources. And, EIA has LNG exports peaking at only 13.8 Bcf/day. A very conservative forecast. While over time resources have been increasing, forecasted demand is outstripping new resources.

e. Failure to consider the uncertain nature of technically recoverable resources. Caution is warranted by DOE to not overcommit.

It is also important to keep in mind that *technically available* resources does not mean that they are *economical* to produce. To this point, the natural gas industry's Potential Gas Committee's most recent report of July 2017 states that 58 percent of all natural gas resources are classified as either possible (new fields) or speculative (frontier fields), which adds more uncertainty that these resources may not produce low-cost natural gas. All the DOE LNG export reports assume that all of this natural gas is economical to produce when no one really knows because no one has ever drilled a well in these new fields or frontier fields.

f. Failure to consider price risks of future political decisions to limit acreage available for drilling or regulations on water or hydraulic fracturing that increase costs that must be recovered in higher prices of natural gas.

We have Presidential elections every four years that can change the political landscape completely. As we have seen with some past Administrations, there were regulatory actions to limit access to federal lands for drilling and regulations to control drilling processes that increase the cost of production. A new Administration could inflict all of these and more, thereby increasing natural gas costs and prices. States have and will continue to take action to limit drilling.

g. Failure to consider that the majority of producers of natural gas do not have a positive cash flow business.

Even with relatively higher crude oil prices for the first half of 2018, only 3 of 33 oil and gas companies posted positive cash flow. This is not sustainable long-term. Wall Street is concerned about the indebtedness of producers. Investors demand certain ROE's to continue to invest or lend money for drilling more wells. The fact that interest rates are also increasing puts further pressure on costs. Combined, this means that the price of natural gas must rise. DOE LNG studies do not address this fundamental issue.

h. Foreign consumers of U.S. LNG exports are receiving the benefits of using our infrastructure that is paid for by U.S. consumers, without paying for it. Their use of it increases our costs.

LNG exports use of U.S. infrastructure increases costs to all U.S. consumers. The DOE has failed to consider these costs.

IECA wishes to intervene and be made a party to this proceeding, with all of the rights attendant to such status pursuant to 10 C.F.R. 590.303(b).

Sincerely,

Paul N. Cicio
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CERTIFICATE OF SERVICE

I hereby certify that I have this day served the foregoing document upon on the applicant and on DOE/FE for inclusion in the FE docket in the proceeding in accordance with 10 C.F.R. § 590.107(b) (2013).

Dated at Washington, D.C., this 11th day of April, 2019.

By:	

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