

**“A Competitive Edge for American  
Manufacturing: Abundant American Energy”**

Before the House Committee on Energy and  
Commerce, Subcommittees on Energy and  
Power, and Commerce, Manufacturing and  
Trade

Thursday, June 20, 2013

Testimony of

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President

Industrial Energy Consumers of America

## THE PUBLIC INTEREST DETERMINATION FOR EXPORTS OF LNG TO NON-FREE TRADE COUNTRIES IS THE LAW, AND ITS IMPLEMENTATION BY DOE DIRECTLY IMPACTS THE FUTURE OF THE U.S. MANUFACTURING RENAISSANCE

Chairmans Whitfield and Terry, and Ranking Members Rush and Butterfield, thank you for the opportunity to testify before you today. My name is Paul N. Cicio, and I am the President of the Industrial Energy Consumers of America (IECA).

The Industrial Energy Consumers of America is a nonpartisan association of leading manufacturing companies with \$1.3 trillion in annual sales, over 1,500 facilities nationwide, and with more than 1.7 million employees worldwide. 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.

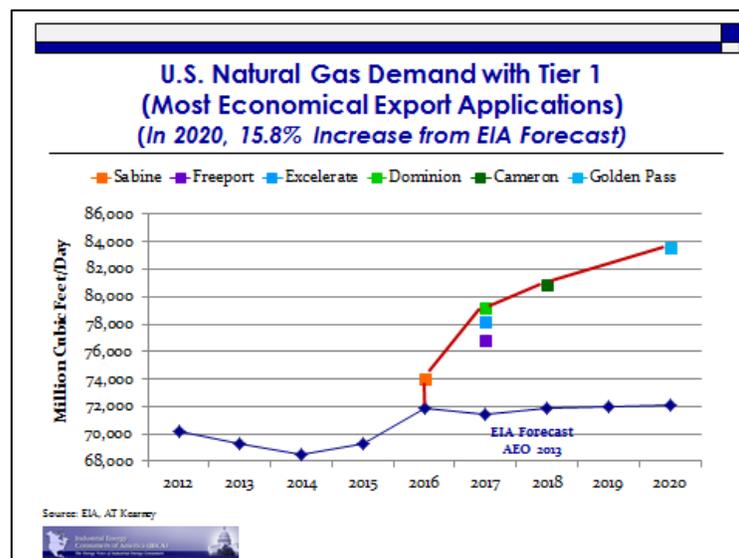
IECA companies are mostly energy-intensive trade-exposed industries. They produce the “building block” products that are used by essentially “all” other manufacturers to produce their products. Almost everything we consume as a nation uses these energy-intensive products. Examples include: chemicals, plastics, iron and steel, aluminum, fertilizer, paper, cement, industrial gases and glass.

If the U.S. desires to have a robust manufacturing sector and to increase value-added exports, these basic industries are essential to accomplish the goal. Otherwise, these products will be imported and the jobs will reside overseas.

### KEY POINTS

- IECA is not opposed to LNG exports but warns policymakers that careless due diligence by DOE on the “public interest determination” and approval of LNG export applications to non-free trade countries, can be a major threat to the continued growth of the manufacturing renaissance. Even relatively few LNG export terminals can have significant negative impacts to the economy.**

The chart below illustrates a scenario of LNG export demand for what industry consultants believe are six of the most economical, or likely export terminals and the timing of when they would begin to ship if approved near-term. In 2020, these six terminals would increase demand by approximately 15.8 percent above the AEO 2013. The export demand would be on top of the AEO 2013 demand increase of 6 percent from 2012 to 2020.



2. **The “public interest determination” for the approval of LNG exports to non-free trade countries is the law. The public interest test is really important because it is a safe-guard to ensure that decisions are being made correctly and with up-to-date information. It is important for policymakers to understand that there are reasons why the U.S. does not have free trade agreements with major LNG importing countries – they do not want free trade. They often discriminate against U.S. manufacturing goods.**
3. **The responsibility for review of LNG export applications resides in the U.S. Department of Energy (DOE), and they have failed in their fiduciary responsibility under the Natural Gas Act in the implementation of the “public interest determination” for consideration of the conditional approval of the Freeport LNG Expansion, L.P. and FLNG Liquefaction, LLC (Freeport LNG) for shipments to non-free trade countries.**
4. **IECA urges the Congress to provide greater oversight and encourage the DOE to complete a rulemaking to develop transparent criteria for the “public interest determination,” with public input on which to make decisions regarding LNG export applications. Decisions on LNG export applications need to be done on a case-by-case basis and sequenced to avoid price spikes and give producers time to increase production. Doing it right can be a win-win. Doing it wrong will be a win for exporters of LNG and their overseas customers, and a terrible economic loss for all domestic consumers and manufacturers.**

## **TESTIMONY**

The rule of law does matter. And, impacts of LNG exports to U.S. natural gas and electricity prices for homeowners and manufacturers, investment, job growth and exports of manufactured goods – do matter. The U.S. is at the early stage of considering a long list of LNG export applications, and this is too important to not adhere to the statutes that are specifically designed to protect the interests of the public.

Among other things, there are at least three unique dimensions of LNG exports that set this issue apart as a vital public policy issue which should give Congress pause and careful oversight as our public officials with jurisdiction.

First, when DOE approves a LNG export terminal, it is for a period of 25 to 30 years. A lot can happen in 30 years that cannot be anticipated today. Caution is needed.

Secondly, natural gas production and consumption is greatly impacted by public policy decisions and regulations. Importantly, every potential public policy decision that is discussed today would have the effect of lowering production or making it more expensive. On demand, every potential public policy discussed would have the effect of increasing – not decreasing – domestic demand for natural gas. Of particular concern is new and potential EPA regulations that drive coal from use in the power and industrial sector, and EPA regulation of GHGs for all sectors of the economy. We cannot say enough how important it is to keep coal, an abundant, reliable and low-cost source of energy in the mix. This will ensure that electricity prices stay reasonable over the long-term. Consumers need coal in the mix to compete with natural gas.

These public policy decisions will impact supply and demand, and will result in increased natural gas and electricity costs that will directly and greatly impact the competitiveness of the manufacturing sector, and the attractiveness to invest and create jobs in the U.S.

Thirdly, unlike most other export products, what happens to the price of natural gas impacts home consumers and manufacturers alike. Just a one cent per million cubic feet increase in natural gas prices costs consumers \$250,000,000. The impact to electricity prices would be additive.

The responsibility for review of LNG export applications resides in the U.S. Department of Energy (DOE), and they have failed in their fiduciary responsibility under the Natural Gas Act in the implementation of the public interest determination for consideration of the conditional approval of the Freeport LNG Expansion, L.P. and FLNG Liquefaction, LLC (Freeport LNG) for shipments to non-free trade countries. The failure by the DOE to establish transparent criteria through a rulemaking process for decision making, and use of up-to-date market assumptions on fundamental elements of the analysis, such as domestic demand and resulting impacts, threatens the future of the manufacturing renaissance if it continues as they consider future export applications.

The carelessness of the conditional approval of the Freeport LNG application is unacceptable. Congress should accept nothing but the best up-to-date analysis of the impact to the economy before considering each LNG export application and, on a case-by-case basis. To this end, we urge the Congress to insist that the DOE conduct a rulemaking to develop a transparent set of criteria with public input as soon as possible.

There is precedence. Over a decade ago, the DOE was confronted with approving “import” facilities, and they wisely implemented a rulemaking that invited public comment. The criteria for exports are extensively more diverse, and have far-reaching negative economic impacts, more so than for imports. Despite the call by consumer groups, such as ourselves, to conduct a rulemaking, the DOE has refused to do so.

To this end, we ask these Committees, why they would not be supportive of asking the DOE to implement such a rulemaking?

To date, DOE has approved two LNG export facilities for shipment to non-free trade countries. The Sabine Pass terminal will increase demand by 2.2 bcf/day, an increase of 3.1 percent. Approval of the Freeport LNG terminal increases demand by 1.4 bcf/day or 2.0 percent. Combined, just these two terminals will increase demand by 5.1 percent as compared to 2012 demand. For perspective, total U.S. demand increased by only 8.8 percent from 2000 to 2012 (a total of 5.8 percent of that total occurred since 2010.)

There are 27 LNG export applications to ship to non-free trade countries. If all were approved, demand would increase by 30.6 bcf/day, a 43.8 percent increase as compared to 2012 demand. (See Appendix)

The DOE May 17, 2013 conditional approval of the Freeport LNG facility cites three reports, all of which use assumptions from the Energy Information Administration (EIA) AEO 2011. In 2010, as the EIA contemplated the AEO 2011 forecast, they had no idea of the \$110 billion of new capital investment that would be announced by natural gas and feedstock intensive manufacturing industries. (See Appendix) **The announced new or expanded facilities will increase natural gas demand between 7 and 9 bcf/ day, an 11 percent increase in U.S. demand.** However, as they made the decision on May 17,

2013, DOE was fully aware of this new increasing demand and failed to consider these and other assumptions.

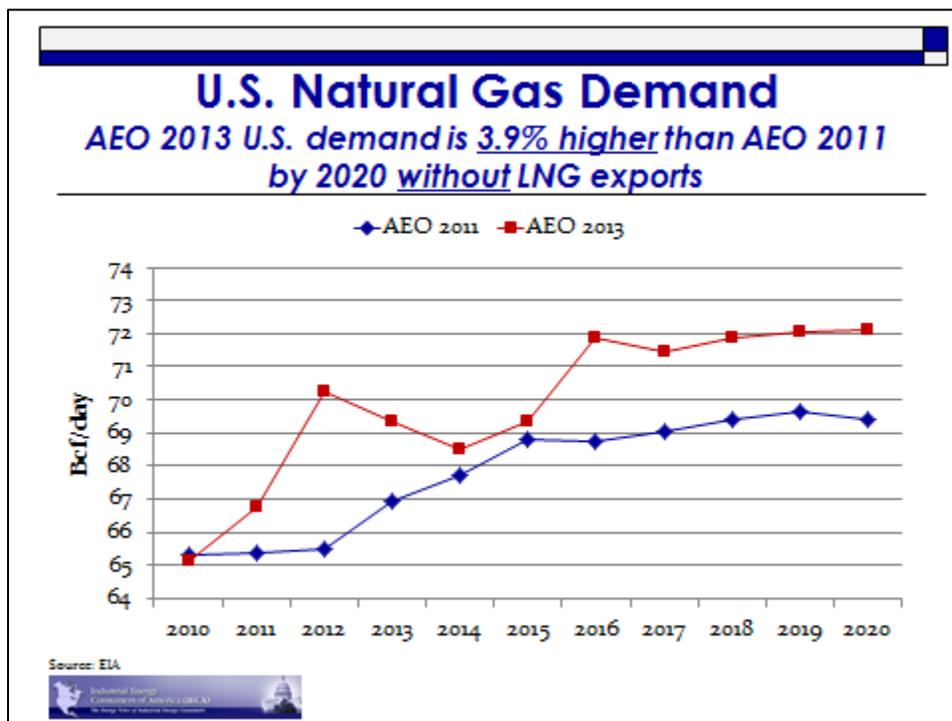
As a result, they also failed to factor in the job creation from the manufacturing renaissance. The Boston Consulting Group estimates that 5 million new jobs will be created in U.S. manufacturing by 2020. Every dollar's worth of natural gas run through our manufacturing economy creates up to \$8 in added value. In some segments, the value-add is more than 20 times.

And, there is new announcements every month that are predicated on the assumption of an abundant low-cost supply of natural gas. Soon, there will be the second wave of investment by the downstream customers of these energy-intensive commodity products.

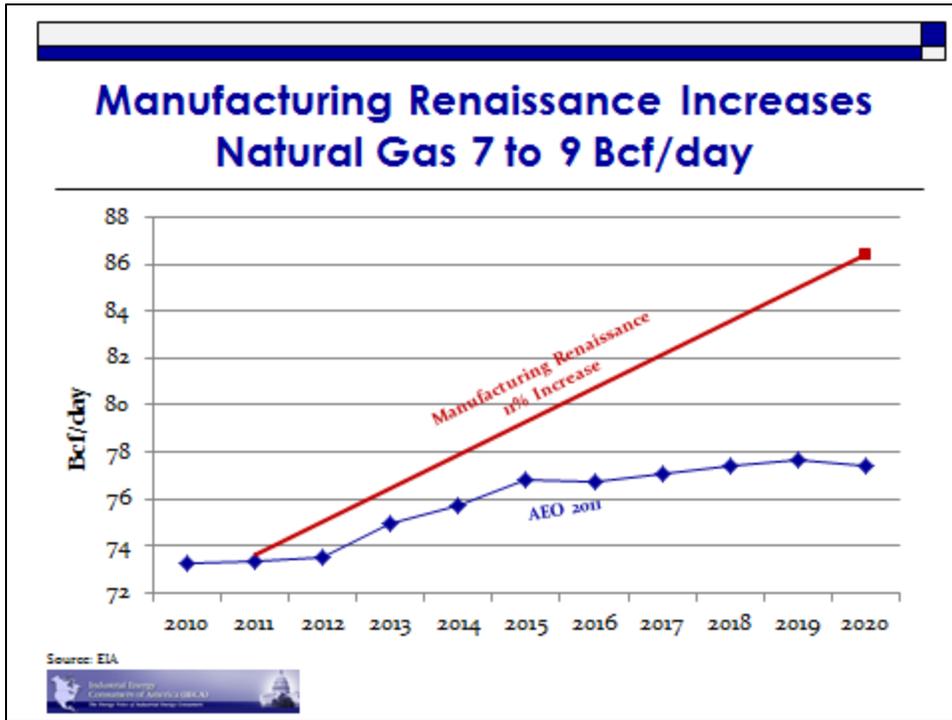
**Below is a series of charts that raise serious questions as to why the DOE's decision on Freeport LNG was not made using the most up-to-date AEO 2013 assumptions, and why DOE failed to consider the new manufacturing renaissance demand.**

Congress should note that DOE's use of AEO 2011 assumptions means that the negative impacts to domestic natural gas and electricity prices, jobs, wages, economic growth and investment are understated.

**CHART 1 – Illustrates how AEO 2011 a natural gas demand forecast differs from the AEO 2013, the AEO 2013 demand is 3.9 percent higher than AEO 2011**



**CHART 2 – Illustrates the significant industrial renaissance demand as compared to the AEO 2011 assumption used to make the Freeport LNG decision.**



**CHART 3 – Compares AEO 2011 vs. AEO 2013 industrial demand, a 6.8 percent decrease.**

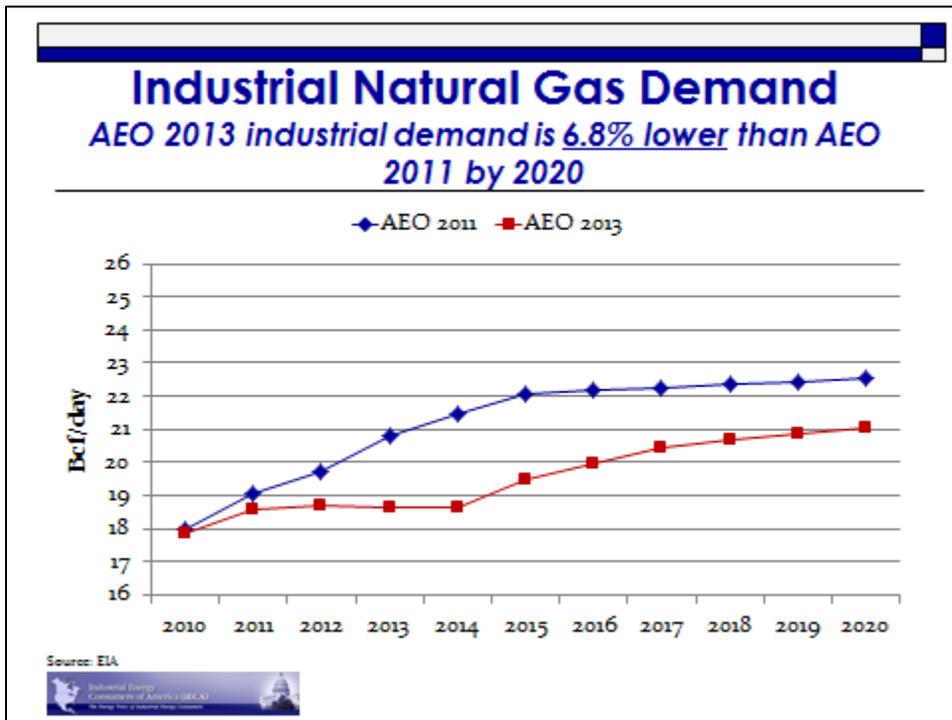


CHART 4 – Compares AEO 2011 vs. AEO 2013 electric power demand, a 20.3 percent increase.

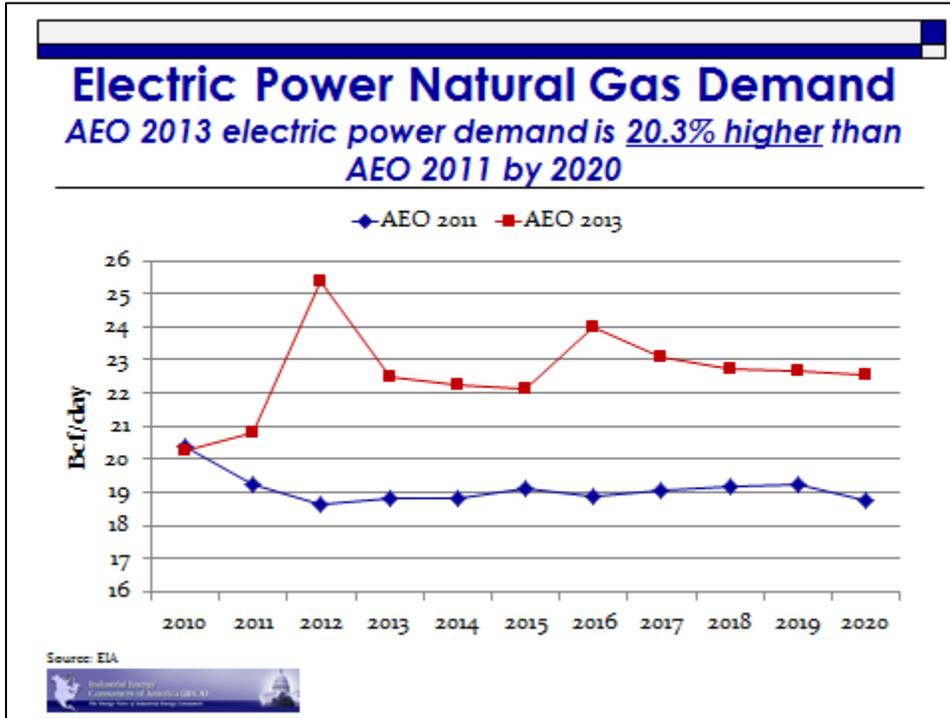
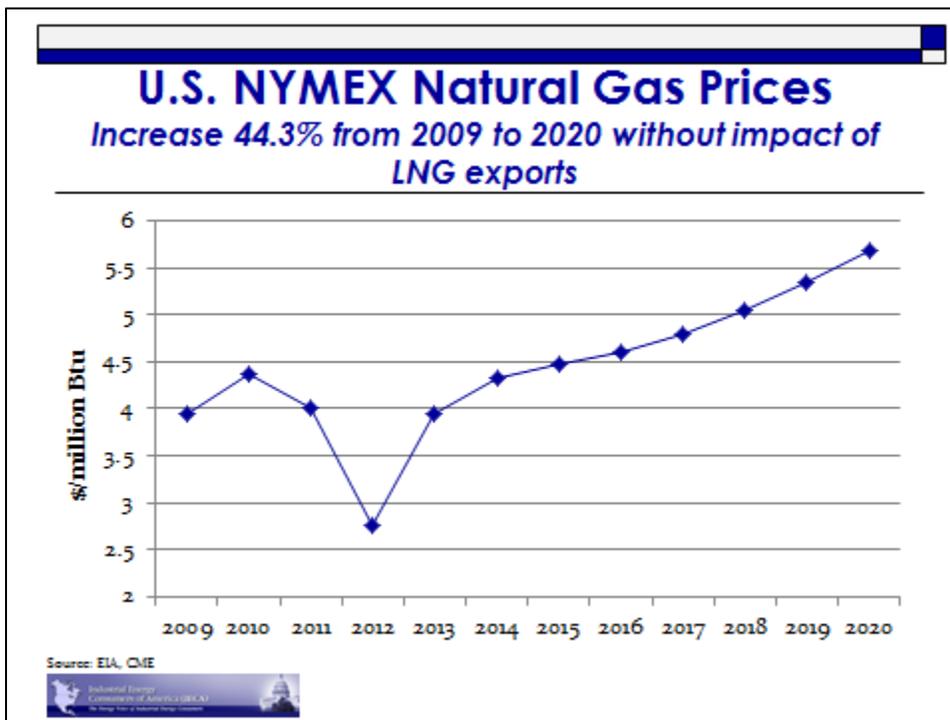


CHART 5 – Illustrates that natural gas prices are strongly rebounding even without the impact of the new demand from LNG exports.



**DOE NERA REPORT:**

Those who favor approval of all LNG export applications, frequently quote the DOE NERA report and the headline that says exports provide “net economic benefit” to the U.S. Actually, the NERA report is quite damning, particularly when one considers that the study uses under-stated domestic demand that results in under-stated negative impacts to the U.S. economy. The quote below from the NERA report can be found on page 7.

*“Expansion of LNG exports has two major effects on income: it raises energy costs and, in the prices, depresses both real wages and the return on capital in all other industries, but it also creates two additional sources of income. First, additional income comes in the form of higher export revenues and wealth transfers from incremental LNG exports at higher prices paid by overseas purchasers.”*

Secondly, we urge you to look at Figure 3 of the NERA report. The chart describes who benefits and who is hurt from exports. Figure 3 indicates that in 2015 there is a net \$10 billion benefit to the U.S. economy. In 2020, there is a \$20 billion gain and this steadily decreases each year to about \$5 billion in 2035. This is a trivial amount given that the U.S. is a \$14 trillion economy.

The Purdue University study explains it this way, “The \$10 billion gain (in 2015) in the NERA study amounts to 6 hours of U.S. economic activity.”

In closing, we have an abundant supply of energy resources that we should use to our economic benefit. However, policymakers must be aware of energy trade issues, and take necessary precautions on behalf of the domestic consumer. The LNG market is not a free market so long as countries dictate supply and demand, set prices to crude oil, and whereby countries, or agents of countries use country coffers to buy and guarantee their supplies of LNG. Countries will always be able to outbid the U.S. consumer for our natural gas.

Thank you.

**APPENDIX**

**CHART 6 – List of \$110 billion projects**

<b>Industry to Invest Over \$110 Billion In Manufacturing Renaissance</b>				
<b>Chemicals and Fertilizer</b>				
	Company	Location	Date Online	Project Type
1	Dow	St. Charles, LA	2012	Ethylene Restart
2	Dow	Freeport, TX	2017	New Ethylene
3	Westlake	Lake Charles, LA	2012	Ethylene Expansion
4	Williams Olefins	Geismar, LA	2013	Ethylene Expansion
5	INEOS	Chocolate Bayou, TX	2013	Ethylene Debottleneck
6	LyondellBasell	Laporte, TX	2014	Ethylene Expansion
7	Westlake	Lake Charles, LA	2014	Ethylene Expansion
8	Aither Chemicals	WV or PA or OH	2016	New Ethylene
9	Exxon Mobil	Baytown, TX	2016	New Ethylene
10	Chevron Phillips	Baytown, TX	2017	New Ethylene
11	Formosa	Point Comfort, TX	2017	New Ethylene
12	Braskem	WV	2017	New Ethylene
13	Sasol	Lake Charles, LA	2018	New Ethylene
14	Shell	PA	2018	New Ethylene
15	Eastman	Longview, TX	2012	Ethylene/Polypropylene Expansion
16	Indorama	Under Consideration	2018	New Ethylene
17	LyondellBasell	Channleview, TX	NA	Ethylene Expansion
18	Sabic	Under Consideration	NA	New Ethylene
19	Occidental/Mexichem JV	Ingleside, TX	2016	New Ethylene
20	PTT Global Chemical	Under Consideration	NA	New Ethylene
21	Hanwha Chemical	Under Consideration	NA	New Ethylene
22	Orascom Construction	Beaumont, TX	2011	Ammonia Restart
23	Orascom Construction	Beumont, TX	2012	Methanol Restart
24	Orascom Construction	Lee County, IA	2015	New Fertilizer
25	Potash Corp	Geismar, LA	2013	Ammonia Restart
26	Potash Corp	Augusta, GA	2013	Ammonia Expansion
27	Rentech Nitrogen	East Dubuque, IL	2013	Ammonia Expansion
28	Austin Powder	Mosheim, TN	2014	Ammonia Expansion
29	LyondellBasell	Channelview, TX	2014	Methanol Restart
30	Methanex	Geismar, LA	2015	Methanol Migration
31	CF Industries	Donaldsonville, LA	2015	Ammonia Expansion
32	CF Industries	Port Neal, IA	2015	Ammonia Expansion
33	Incitec Pivot	Under Consideration	NA	Ammonia Migration
34	Koch Fertilizer	Various	NA	Ammonia Expansion
35	LSB Industries	Pryor, OK	NA	Ammonia Restart
36	Dyno Nobel	Waggaman, LA	2015	New Ammonia
37	Celanese	Clear Lake, TX	2015	New Methanol
38	CHS Inc.	ND	2016	New Ammonia
39	Agrium	Under Consideration	2017	New Fertilizer
40	Dakota Gas	Beulah, ND	2016	New Fertilizer
41	ND Corn Growers Association	ND	NA	New Fertilizer
42	Ohio Valley Resources	Rockport, IN	2016	New Ammonia
43	Mosaic	St. James Parish, LA	2016	Ammonia Expansion
44	Dow	Freeport, TX	2015	New Propylene
45	Dow	Freeport, TX	2018	New Propylene
46	Eastman	Under Consideration	2015	New Propylene
47	Formosa	Point Comfort, LA	2016	New Propylene
48	LyondellBasell	Channelview, TX	2014	New Propylene
49	Mitsui	Ohio	2012	Propylene Expansion
50	Enterprise	Mont Belvieu, TX	2013	Propylene Expansion
51	Enterprise	Mont Belvieu, TX	2015	New Propylene
52	Exxon Mobil	Baytown, TX	2016	2 New Polyethylenes
53	Chevron Phillips	Old Ocean, TX	2017	2 New Polyethylenes
54	Eastman	Longview, TX	2012	EthylHexanol Expansion
55	Chevron Phillips	Baytown, TX	2014	New Hexene
56	Huntsman Chemical	McIntosh, AL	NA	Epoxy Expansion
57	INEOS	Gulf Coast	NA	Ethylene oxide
58	Kuraray	Pasadena, CA	2014	EVOH Expansion
59	Lanxness	Orange, TX	NA	Nd-PBR
60	Lubrizol	Deer Park, TX	2015	Plastic Resins

61	Honeywell Specialty materials	Mobile, AL	2012	Adsorbents; Catalysts
62	Westlake	Geismar, LA	2013	New Chlor-Alkali
63	Dow-Mitsui JV	Freeport, TX	2013	New Chlor Alkali
64	Molycorp	Mountain Pass, CA	NA	New Chlor-Alkali and rare earth metals mining
65	Formosa	Point Comfort, TX	2012	Chlorine/Caustic Soda
66	Formosa	Point Comfort, TX	2012	Ethylene Dichloride
67	Shintech	Plaquemine, LA	2012	VCM
68	Shintech	Plaquemine, LA	2012	Chlorine/Caustic Soda
69	Shintech	Plaquemine, LA	2012	PVC
70	Occidental	Jacksonville, TN	2013	Chlorine and Caustic Soda
71	Dow Agrosiences	Freeport, TX	NA	Herbicide
72	Mitsubishi Chemical Holdings Corp.	Freeport, TX	2017	Acrylic Resin
73	South Louisiana Methanol	St. James Parish, LA	2016	New Methanol
74	Ascend Performance Materials	Alvin, TX	2015	New Propane Dehydrogenation
75	Indemitsu / Mitsui	Freeport, TX	2016	Alpha Olefins
76	BASF	Geismar, LA	2014	New Formic Acid
77	Incitec Pivot	Waggaman, LA	2016	New Fertilizer
78	Eastman	Kingsport, TN	2013-2020	Multiple Expansions
79	G2X Energy	Pampa, TX	2014	New Methanol
80	Northern Plains Nitrogen	Grand Forks, ND	2017	Fertilizer / Urea
81	Cronus Chemicals	Under Consideration	NA	New Ammonia
82	Appalachian Resins	Marshall County, WV	2015	New Polyethylene
83	Petrologistics	Houston, TX	2016	Propylene Expansion
84	Linde	La Porte, TX	2015	Gasification and Air Separation Units
<b>Steel &amp; Aluminum</b>				
85	Alcoa	Upper Burrell, PA	2012	Expansion
86	Alcoa	Lafayette, Indiana	2014	New
87	Alcoa	Davenport, IA	2013	Expansion
88	ArcelorMittal	Cleveland, OH	2012	Expansion
89	Carpenter Technology	Reading, PA	NA	Expansion
90	Carpenter Technology	Limestone County, AL	2013	New
91	Coilplus	North Carolina	2014	Expansion
92	Essar Steel	Nashwauk, MN	2015	New
93	Gerdau	St. Paul, MN	2014	New
94	Nucor	Blytheville, AK	2014	Expansion
95	Timken	Canton, OH	2014	Expansions
96	United States Steel	Lorain, OH	Completed 10/12	Expansions
97	United States Steel	Leipsic, OH	NA	New Steel
98	Metal-Matic	Middleton, OH	2012	Expansion
99	Vallourec and Mannesmann	Youngstown, OH	NA	New
100	Welspun	Little Rock, AK	NA	Expansion
101	Nucor	St. James Parish, LA	2013	New
102	Voestalpine	Under Consideration	NA	New
103	Borusan Mannesman	Under Consideration	2014	New
<b>Tires</b>				
104	Bridgestone	Aiken, SC	2014	New off-road radial tire / expansion passenger/light truck tire
105	Continental	Sumter, SC	2013 start / 2021 full capac.	Passenger and light truck tires
106	Michelin	Anderson, SC	2015	Earthmover tires (OTR)
107	Bridgestone	Bloomington, IL	2013	OTR Tires
<b>Plastics</b>				
108	M&G Group	Corpus Christi, TX	NA	New PET Plant
109	M&G Group	Corpus Christi, TX	NA	New PTA Plant
110	Huntington Foam	Greenville, MI	NA	Expansion
111	JM Eagle	Sunnyside, WA and Meadville, PA	NA	Polyethylene expansion
112	Springfield Plastics	Auburn, IL	2012	Polyethylene expansion
113	Kyowa America	Portland, TN	NA	Plastic Injection Molding
114	Lanxess	Gastonia, NC	Opened 9/12	Plastic

<b>Natural Gas to Liquids</b>				
115	Shell	LA or TX	NA	New
116	Sasol	LA	2018	New
117	Calumet Specialty Products Partners	Karns City, PA	2014	New
118	G2X Energy	Lake Charles, LA	2017	New
<b>Glass</b>				
119	Sage	Fairbault, MN	Opened 9/12	Dynamic; Electrochromic Glass
<b>Transportation &amp; Transportation Equipment</b>				
120	Caterpillar	Athens, GA	NA	Tractors and Excavators
121	Airbus	Mobile, AL	2015	Airplanes
122	Honda Motor Co.	Anna, OH	2012	Advanced Transmission Components
<b>Packaging</b>				
123	Abbott Laboratories	Tipp City, OH	2013	Aseptic Packages
Current as of May 2013				

**CHART 7 – List of LNG export applications.**

**NATURAL GAS EXPORT APPLICATIONS**

*(Updated June 13, 2013)*

NO.	NAME	EXPORT DESTINATION	LOCATION	SIZE OF EXPORTS	DATE FILED	DATE APPROVED
1	Sabine Pass LNG Terminal	Free Trade Nations	Sabine, LA	803 bcf/year over a 30-year period	08/11/10	09/07/10
	Sabine Pass LNG Terminal	Non-Free Trade Nations	Sabine, LA	803 bcf/year over a 30-year period	10/12/10	05/20/11
2	Lake Charles Exports, LLC	Free Trade Nations	Lake Charles, LA	730 bcf/year over a 25-year period	05/06/11	07/22/11
	Lake Charles Exports, LLC	Non-Free Trade Nations	Lake Charles, LA	730 bcf/year over a 25-year period	05/06/11	Pending
3	Carib Energy LLC	Free Trade Nations	Southeast Atlantic, FL, Gulf Coast	10.95 bcf/year over a 25-year period	06/06/11	07/27/11
	Carib Energy LLC	Non-Free Trade Nations	Southeastern United States, Gulf Coast	3.65 bcf/year over a 25-year period	10/20/11	Pending
4	Jordan Cove Energy Project	Free Trade Nations	Coos Bay, OR	438 bcf/year over a 30-year period	09/22/11	12/07/11
	Jordan Cove Energy Project	Non-Free Trade Nations	Coos Bay, OR	292 bcf/year over a 25-year period	03/23/12	Pending
5	Cameron LNG LLC (Sempra)	Free Trade Nations	Cameron, LA	620.50 bcf/year over a 20-year period	11/10/11	01/17/12
	Cameron LNG LLC (Sempra)	Non-Free Trade Nations	Cameron, LA	620.50 bcf/year over a 20-year period	12/21/11	Pending
6	Dominion Cove Point, LP	Free Trade Nations	Calvert County, MD	365 bcf/year over a 25-year period	09/01/11	10/07/11
	Dominion Cove Point, LP	Non-Free Trade Nations	Calvert County, MD	365 bcf/year over a 25-year period	10/03/11	Pending
7	Freeport LNG, LLC	Free Trade Nations	Freeport, TX	511 bcf/year over a 25-year period	12/17/10	02/10/11
	Freeport LNG, LLC	Non-Free Trade Nations	Freeport, TX	511 bcf/year over a 25-year period	12/17/10	05/17/13

8	Freeport LNG, LLC	Free Trade Nations	Freeport, TX	511 bcf/year over a 25-year period	01/12/12	02/10/12
	Freeport LNG, LLC	Non-Free Trade Nations	Freeport, TX	511 bcf/year over a 25-year period	12/19/11	Pending
9	Gulf Coast LNG Export, LLC	Free Trade Nations	Brownsville, TX	1022 bcf/year over a 25-year period	01/10/12	10/16/12
	Gulf Coast LNG Export, LLC	Non-Free Trade Nations	Brownsville, TX	1022 bcf/year over a 25-year period	01/10/12	Pending
10	Gulf LNG Liquefaction	Free Trade Nations	Pascagoula, MS	547.50 bcf/year over a 25-year period	05/02/12	06/15/12
	Gulf LNG Liquefaction	Non-Free Trade Nations	Pascagoula, MS	547.50 bcf/year over a 20-year period	08/31/12	Pending
11	LNG Development Company	Free Trade Nations	Warrenton, OR	456.25 bcf/year over a 30-year period	05/03/12	05/31/12
	LNG Development Company	Non-Free Trade Nations	Warrenton, OR	456.25 bcf/year over a 25-year period	07/16/12	Pending
12	SB Power Solutions	Free Trade Nations	Atlantic Coast	25.55 bcf/year over a 25-year period	05/07/12	06/15/12
13	Southern LNG Company	Free Trade Nations	Savannah, GA	182.50 bcf/year over a 25-year period	05/15/12	06/15/12
	Southern LNG Company	Non-Free Trade Nations	Savannah, GA	182.50 bcf/year over a 20-year period	08/31/12	Pending
14	Excelerate Liquefaction	Free Trade Nations	Calhoun County, TX	503.70 bcf/year over a 20-year period	05/25/12	08/09/12
	Excelerate Liquefaction	Non-Free Trade Nations	Calhoun County, TX	503.70 bcf/year over a 20-year period	10/05/12	Pending
15	Golden Pass Products, LLC	Free-Trade Nations	Sabine Pass, TX	949 bcf/year over a 25-year period	08/17/12	09/27/12
	Golden Pass Products, LLC	Non-Free Trade Nations	Sabine Pass, TX	949 bcf/year over a 25-year period	10/25/12	Pending
16	Cheniere Marketing, LLC	Free Trade Nations	Corpus Christi, TX	766.50 bcf/year over a 25-year period	08/31/12	10/16/12
	Cheniere Marketing, LLC	Non-Free Trade Nations	Corpus Christi, TX	766.50 bcf/year over a 22-year period	08/31/12	Pending
17	Main Pass Energy Hub, LLC	Free Trade Nations	16 miles offshore of LA	1,175.30 bcf/year over a 30-year period	09/11/12	01/04/13
18	CE FLNG, LLC	Free Trade Nations	Plaquemines Parish, LA	390.55 bcf/year over a 30-year period	09/12/12	11/21/12
	CE FLNG, LLC	Non-Free Trade Nations	Plaquemines Parish, LA	390.55 bcf/year over a 30-year period	09/12/12	Pending
19	Waller LNG Services, LLC	Free Trade Nations	Cameron, LA	58.40 bcf/year over a 25-year period	10/12/12	12/20/12
20	Pangea LNG (North America)	Free Trade Nations	Ingleside, TX	397.85 bcf/year over a 25-year period	11/29/12	01/30/13
	Pangea LNG (North America)	Non-Free Trade Nations	Ingleside, TX	397.85 bcf/year over a 25-year period	12/19/12	Pending
21	Magnolia LNG, LLC	Free Trade Nations	Lake Charles, LA	197.10 bcf/year over a 25-year period	12/18/12	02/27/13
22	Trunkline LNG Export, LLC	Free Trade Nations	Lake Charles, LA	Combined w/ Lake Charles Exports Appl.	01/10/13	03/07/13
	Trunkline LNG	Non-Free Trade	Lake Charles, LA	Combined w/ Lake Charles	01/10/13	Pending

	Export, LLC	Nations		Exports Appl.		
23	Gasfin Development USA	Free Trade Nations	Cameron Parish, LA	73 bcf/year over a 25-year period	01/11/13	03/07/13
24	Freeport-McMoRan Energy	Free Trade Nations	16 miles offshore of LA	Combined w/ Main Pass Energy Hub, LLC	02/22/13	05/24/13
	Freeport-McMoRan Energy	Non-Free Trade Nations	16 miles offshore of LA	1,175.30 bcf/year over a 30-year period	02/22/13	Pending
25	Sabine Pass LNG Terminal	Free Trade Nations	Sabine, LA	102.20 bcf/year over a 20-year period	02/27/13	Pending
	Sabine Pass LNG Terminal	Non-Free Trade Nations	Sabine, LA	102.20 bcf/year over a 20-year period	02/27/13	Pending
26	Sabine Pass LNG Terminal	Free Trade Nations	Sabine, LA	87.60 bcf/year over a 20-year period	04/02/13	Pending
	Sabine Pass LNG Terminal	Non-Free Trade Nations	Sabine, LA	87.60 bcf/year over a 20-year period	04/02/13	Pending
27	Venture Global LNG, LLC	Free Trade Nations	Cameron Parish, LA	244.55 bcf/year over a 25-year period	05/13/13	Pending
	Venture Global LNG, LLC	Non-Free Trade Nations	Cameron Parish, LA	244.55 bcf/year over a 25-year period	05/13/13	Pending

Source: DOE

**TOTAL = 11,169 Bcf/year (30.60 Bcf/day or 11.169 Tcf/year)**

- U.S. natural gas consumption in 2012 was 25.5 Tcf
- 11.169 Tcf is 43.8% of 2012 demand