

U.S. LNG Exports: A Regulatory Overview

Joint Legislative Commission on Energy Policy
Raleigh, North Carolina
February 4, 2014

Bill Cooper
President, Center for Liquefied Natural Gas

What is the Center for LNG?

- An association of LNG producers, shippers, terminal operators, and energy trade associations
- A clearinghouse for educational and technical information about LNG
- Facilitates rational discussions and develops public policies that support LNG's increasing contribution toward meeting the nation's energy needs and supporting economic growth

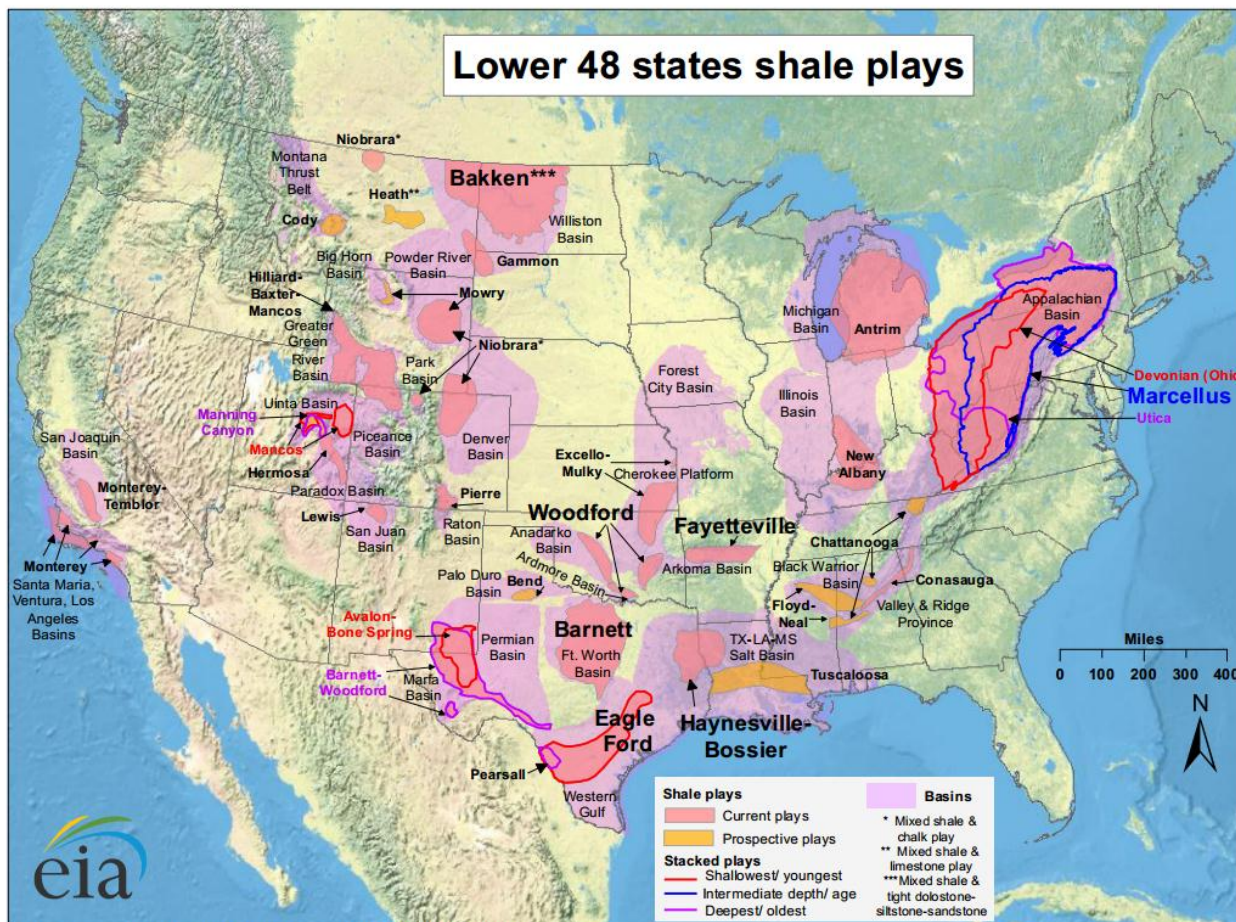
CLNG Membership

- American Gas Association, ex-officio
- American Petroleum Institute, ex-officio
- BG North America
- BP America, Inc.
- Cheniere
- Chevron Corporation
- ConocoPhillips
- Dominion
- ExxonMobil
- Freeport LNG
- GDF SUEZ
- Mitsubishi
- Natural Gas Supply Association, ex-officio
- Qatargas
- Sempra Global
- Shell
- TOTAL LNG USA, Inc.

CLNG Activities

- 💧 **Education**
- 💧 **Government Outreach**
- 💧 **Technical Analysis**
- 💧 **Legislative & Regulatory Analysis**
- 💧 **Media Outreach**

Supply Map

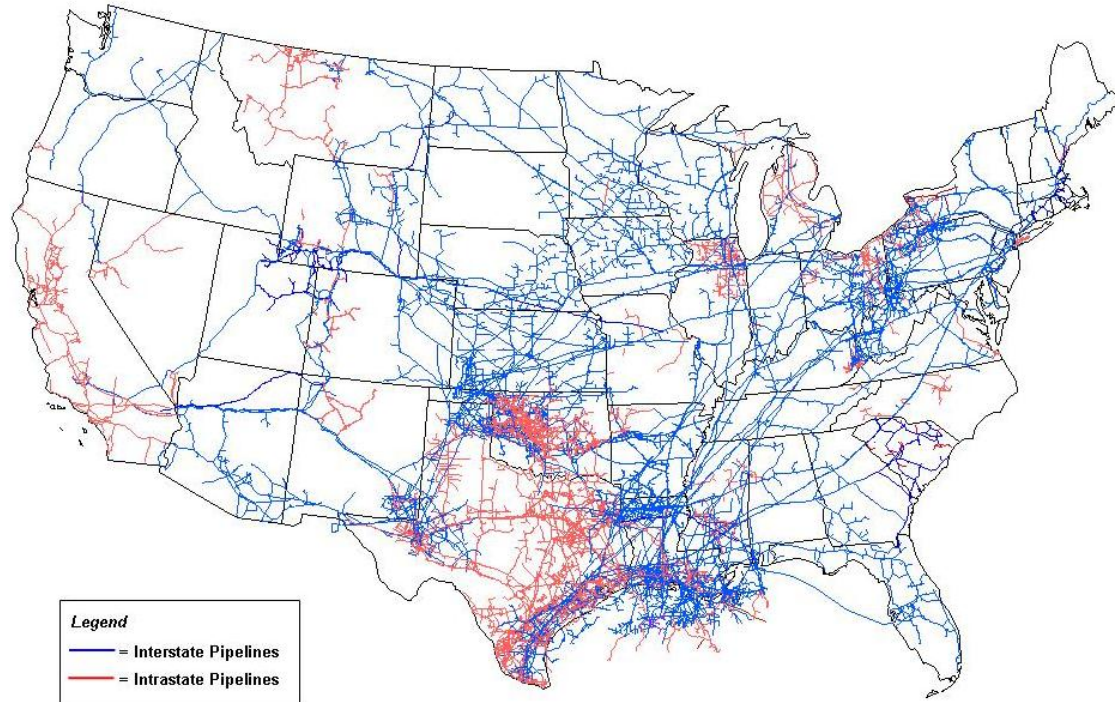


Pipeline Map

About U.S. Natural Gas Pipelines - Transporting Natural Gas

based on data through 2007/2008 with selected updates

U.S. Natural Gas Pipeline Network, 2009



Source: Energy Information Administration, Office of Oil & Gas, Natural Gas Division, Gas Transportation Information System

Statutory/Regulatory Overview

- 💧 The Natural Gas Act
- 💧 10 Code of Federal Regulations Part 590
- 💧 DOE Policy Guidelines, 49 Federal Register 6684, February 22, 1984, as amended
- 💧 Previous DOE decisions
- 💧 Federal Register notices for currently pending applications
- 💧 Recent DOE/FE Orders

Recent DOE Conditional Orders

- **DOE/FE Order 3282: Freeport LNG Expansion, L.P. & FLNG Liquefaction, LLC**
- **DOE/FE Order 3324: Lake Charles Exports, LLC**
- **DOE/FE Order 3331: Dominion Cove Point LNG, LP**
- **DOE/FE Order 3357: Freeport LNG Expansion 2**

10 Code of Federal Regulations Part 590

- Applications must be filed 90 days before the requested action.
- Applications must be complete before being considered.
- DOE must publish notice in the Federal Register and provide at least thirty (30) days for persons to file protests, comments, or motions to intervene.

The Natural Gas Act (NGA)

- “...no person shall export any natural gas from the United States to a foreign country or import any natural gas from a foreign country without first having secured an order of the Commission authorizing it to do so. The Commission shall issue such order upon application, unless, after opportunity for hearing, it finds that the proposed exportation or importation will not be consistent with the public interest.”

15 USC Sec. 717b(a)

Natural Gas Act (continued)

- “For the purposes of subsection (a) of this section, the importation of natural gas referred to in subsection (b) of this section, or the exportation of natural gas to a nation with which there is in effect a free trade agreement requiring national treatment for trade in natural gas, shall be deemed to be consistent with the public interest, and applications for such importation or exportation shall be granted without modification or delay.”

15 USC Sec. 717b(c)

NEPA Responsibilities

- “The Commission [Federal Energy Regulatory Commission] shall act as lead agency for the purposes of coordinating all applicable Federal authorizations and for the purposes of complying with the National Environmental Policy Act of 1969 (42 USC 4321 et seq).” 15 USC 717n(b).
- The decisions are consistent with the Natural Gas Act. “[P]ersons wishing to raise questions regarding the environmental review...are responsible for doing so within the FERC proceedings.” Pages 97, 109, 122 & 132 respectively

Regulatory Application of NGA

- 💧 Section 3 of the Natural Gas Act does not define “public interest.”
- 💧 DOE Policy Guidelines, February 22, 1984
 - “...thus giving broad discretion to the government in establishing criteria...”
 - “The policy cornerstone of the public interest standard is competition.”
- 💧 No prescribed time limitations in which to make a decision.

“The Public Interest”

- The decisions rely upon DOE’s Policy Guidelines, 49 FR 6684, February 22, 1984:
 - “The market, not government, should determine the price and other contract terms of imported [or exported] natural gas. The federal government’s primary responsibility in authorizing imports [or exports] will be to evaluate the need for the gas and whether the import [or export] arrangement will provide the gas on a competitively priced basis for the duration of the contract while minimizing regulatory impediments to a freely operating market.” Pages 6, 7, 8, & 8 respectively.

Elaboration on the Public Interest

- “[W]e are guided by the principle that the public interest requires us to look to the impacts to the U.S. economy as a whole, without privileging the commercial interests of any industry over another.” Pages 72, 84, 99, & 109 respectively.
- “[W]e continue to be guided by the long-standing principle established in our Policy Guidelines that resource allocation decisions of this nature are better left to the market, rather than the Department, to resolve.” Pages 73, 85, 99, & 109 respectively.
- “DOE believes that the public interest generally favors authorizing proposals to export natural gas that have been shown to lead to net benefits to the U.S. economy.” Pages 75, 87, 101, & 111 respectively.

Public Interest Criteria

• DOE focuses on the following:

- “The domestic need for the natural gas proposed to be exported,
- Whether the proposed exports pose a threat to the security of domestic natural gas supplies,
- Whether the arrangement is consistent with DOE/FE’s policy of promoting market competition, and
- Any other factors bearing on the public interest”

The 2012 LNG Exports Study

- “DOE commissioned the LNG Export Study to inform DOE’s decisions on applications seeking authorization to export LNG from the lower-48 states to non-free trade agreement (FTA) countries.”
- NERA developed a total of 63 scenarios, including 16 U.S. scenarios modeled by the EIA.
- NERA modeled cases with no exports and with unlimited exports.

The 2012 LNG Exports Study Conclusions

- “The macroeconomic analysis shows that there are consistent net economic benefits across all the scenarios examined and that the benefits generally become larger as the amount of exports increases.”
- “Every scenario shows improvement in GDP over the No-Exports cases...”
- “U.S. natural gas prices will not become linked to world oil prices.”
- “The increase in investment...provides, in general, near-term stimulus to the economy.”
- “The range of aggregate macroeconomic results from this study suggests that LNG export has net benefits to the U.S. economy.”

DOE's Support of the 2012 LNG Exports Study

- “The conclusion of the LNG Export Study is that the United States will experience net economic benefits from issuance of authorizations to export domestically produced LNG.” Pages 110, 123, 140, & 153 respectively.
- “We [DOE] find that the LNG Export Study is fundamentally sound and supports the proposition that the proposed authorization would not be inconsistent with the public interest.” Pages 110, 123, 140, & 153 respectively.

Subsequent DOE Criteria

- Impact of current application and the cumulative impact of previously approved applications on the domestic need for the gas proposed for export
- Adequacy of domestic natural gas supply
- U.S. Energy security
- Other issues, including the following:
 - The impact on U.S. economy (GDP)
 - Consumers
 - Industry
 - U.S. balance of trade
 - Jobs creation
 - International considerations
 - “Whether the arrangement is consistent with DOE’s policy of promoting competition in the marketplace by allowing commercial parties to freely negotiate their own trade arrangements”

The Natural Gas Act (NGA)

- “The Commission may by its order grant such application, in whole or in part, with such modification and upon such terms and conditions as the Commission may find necessary or appropriate, and may from time to time, after opportunity for hearing, and for good cause shown, make such supplemental order in the premises as it may find necessary or appropriate....” 15 USC Sec. 717b
- “The Commission shall have the power to perform any and all acts, and to prescribe, issue, make, amend, and rescind such orders, rules, and regulations as it may find necessary or appropriate to carry out the provisions of this act.” 15 USC Sec. 717o

Existing LNG Export Authorizations



Department of Energy
Washington, DC 20585
February 24, 2012

The Honorable Edward J. Markey
Ranking Member
Committee on Natural Resources
United States House of Representatives
2108 Rayburn House Office Building
Washington, DC 20515

Dear Representative Markey:

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amended, created a different standard of review for applications to export natural gas, including LNG, to those countries with which the United States has in effect an FTA requiring national treatment for trade in natural gas. The amended section 3(c) requires such applications to be deemed consistent with the public interest, and granted without modification or delay. DOE does not have the authority to impose conditions on the resulting authorizations. The result is a bifurcated regulatory regime over which DOE has only partial control or influence.

Existing LNG Export Authorizations

You asked whether DOE would ever withdraw approvals of any previously-granted LNG export authorizations, particularly in the event of a price spike in domestic prices of natural gas. As we observed in *Sabine Pass*, DOE's authority to issue supplemental orders modifying previous authorizations is contained in NGA section 3(a) and this authority may only be exercised after opportunity for hearing and for good cause shown. DOE does not, however, intend to use this authority as a price maintenance mechanism. Moreover, DOE takes very seriously the good-faith investment-backed expectations of private parties subject to its regulatory jurisdiction. Accordingly, DOE would be reluctant to withdraw or modify a previously-granted authorization, except in the event of extraordinary circumstances. To date, DOE has not had occasion to exercise this authority.

DOE Modification Authority



Department of Energy

Washington, DC 20585

October 17, 2013

The Honorable Lisa Murkowski
United States Senate
Washington, DC 20510

Dear Senator Murkowski:

Thank you for your letter of August 2 regarding exports of liquefied natural gas (LNG) to non-free trade agreement (non-FTA) countries. You have expressed an interest in better understanding the Department of Energy's (DOE) authority to modify or rescind prior approvals under two provisions of the Natural Gas Act (NGA) and under the Energy Policy and Conservation Act.

The Department takes very seriously the investment-backed expectations of private parties subject to its regulatory jurisdiction. As we have stated consistently, DOE would not rescind a previously-granted authorization except in the event of extraordinary circumstances. The Department takes very seriously the investment-backed expectations of private parties subject to its regulatory jurisdiction. As we have stated consistently, DOE would not rescind a previously-granted authorization except in the event of extraordinary circumstances or use this authority as a price maintenance mechanism. Your letter included several questions related to this issue, which we address below.

Q1. Has DOE used authority under section 3(a) of the NGA to issue a supplemental order modifying or rescinding authority granted? If so, how many times, and generally, under what circumstances?

A1. DOE has no record of having vacated or rescinded an authorization to import or export natural gas over the objections of the authorization holder. DOE's records indicate that supplemental orders vacating prior authorizations to import or export natural gas, including LNG, have been issued only in circumstances where the authorization holder had not utilized its authorization for several years following the issuance of the authorization and either had requested the authorization be vacated, had gone out of business, or was non-responsive to our inquiries. In all of these cases, DOE honored the request of any company that had been contacted by DOE that requested their authorization remain effective.

On December 22, 2011, DOE vacated an authorization issued in 1989 to Yukon Pacific Company, L.P. for the export of LNG. See Order No. 350-C, DOE/FE Docket No. 92-35-LNG. Order No. 350-C was issued at the request of the authorization holder. The authorization holder had never utilized the authorization and had no plans to do so at the time it was vacated.



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Overview

Applications Received by DOE/FE to Export Domestically Produced LNG from the Lower-48 States (as of December 31, 2013)

All Changes Since December 6, 2013 Update Are In Red

Company	Quantity ^(a)	FTA Applications ^(b) (Docket Number)	Non-FTA Applications ^(c) (Docket Number)
Sabine Pass Liquefaction, LLC	2.2 billion cubic feet per day (Bcf/d) ^(d)	Approved (10-85-LNG)	Approved (10-111-LNG)
Freeport LNG Expansion, L.P. and FLNG Liquefaction, LLC	1.4 Bcf/d ^(d)	Approved (10-160-LNG)	Approved (10-161-LNG)
Lake Charles Exports, LLC	2.0 Bcf/d ^{(d)*}	Approved (11-59-LNG)	Approved (11-59-LNG)
Carib Energy (USA) LLC	0.03 Bcf/d: FTA 0.01 Bcf/d: non-FTA ^(f)	Approved (11-71-LNG)	Under DOE Review (11-141-LNG)
Dominion Cove Point LNG, LP	1.0 Bcf/d: FTA 0.77 Bcf/d: non-FTA	Approved (11-115-LNG)	Approved (11-128-LNG)
Jordan Cove Energy Project, L.P.	1.2 Bcf/d: FTA 0.8 Bcf/d: non-FTA ^(k)	Approved (11-127-LNG)	Under DOE Review (12-32-LNG)
Cameron LNG, LLC	1.7 Bcf/d ^(d)	Approved (11-145-LNG)	Under DOE Review (11-162-LNG)
Freeport LNG Expansion, L.P. and FLNG Liquefaction, LLC ^(h)	1.4 Bcf/d: FTA 0.4 Bcf/d: non-FTA ^(k)	Approved (12-06-LNG)	Approved (11-161-LNG)
Gulf Coast LNG Export, LLC ^(j)	2.8 Bcf/d ^(d)	Approved (12-05-LNG)	Under DOE Review (12-05-LNG)
Gulf LNG Liquefaction Company, LLC	1.5 Bcf/d ^(d)	Approved (12-47-LNG)	Under DOE Review (12-101-LNG)
LNG Development Company, LLC (d/b/a Oregon LNG)	1.25 Bcf/d ^(d)	Approved (12-48-LNG)	Under DOE Review (12-77-LNG)
SB Power Solutions Inc.	0.07 Bcf/d	Approved (12-50-LNG)	n/a
Southern LNG Company, L.L.C.	0.5 Bcf/d ^(d)	Approved (12-54-LNG)	Under DOE Review (12-100-LNG)
Excelerate Liquefaction Solutions I, LLC	1.38 Bcf/d ^(d)	Approved (12-61-LNG)	Under DOE Review (12-146-LNG)
Golden Pass Products LLC	2.6 Bcf/d ^(d)	Approved (12-88-LNG)	Under DOE Review (12-156-LNG)
Cheniere Marketing, LLC	2.1 Bcf/d ^(d)	Approved (12-99-LNG)	Under DOE Review (12-97-LNG)
Main Pass Energy Hub, LLC	3.22 Bcf/d ^{(d)**}	Approved (12-114-LNG)	n/a
CE FLNG, LLC	1.07 Bcf/d ^(d)	Approved (12-123-LNG)	Under DOE Review (12-123-LNG)
Waller LNG Services, LLC	0.16 Bcf/d: FTA 0.19 Bcf/d: non-FTA	Approved (12-152-LNG)	Under DOE Review (13-153-LNG)
Pangea LNG (North America) Holdings, LLC	1.09 Bcf/d ^(d)	Approved (12-174-LNG)	Under DOE Review (12-184-LNG)
Magnolia LNG, LLC	0.54 Bcf/d ^(d)	Approved (12-183-LNG)	n/a
Trunkline LNG Export, LLC	2.0 Bcf/d ^{(d)*}	Approved (13-04-LNG)	Under DOE Review (13-04-LNG)
Gasfin Development USA, LLC	0.2 Bcf/d ^(d)	Approved (13-06-LNG)	Under DOE Review (13-161-LNG)
Freeport-McMoRan Energy LLC	3.22 Bcf/d ^{(d)**}	Approved (13-26-LNG)	Under DOE Review (13-26-LNG)
Sabine Pass Liquefaction, LLC	0.28 Bcf/d ^(d)	Approved (13-30-LNG)	Under DOE Review (13-30-LNG)
Sabine Pass Liquefaction, LLC	0.24 Bcf/d ^(d)	Approved (13-42-LNG)	Under DOE Review (13-42-LNG)
Venture Global LNG, LLC	0.67 Bcf/d ^(d)	Approved (13-69-LNG)	Under DOE Review (13-69-LNG)
Advanced Energy Solutions, L.L.C.	0.02 Bcf/d	Approved (13-104-LNG)	n/a
Argent Marine Management, Inc.	0.003 Bcf/d	Approved (13-105-LNG)	n/a
Eos LNG LLC	1.6 Bcf/d ^(d)	Approved (13-115-LNG)	Under DOE Review (13-116-LNG)
Barca LNG LLC	1.6 Bcf/d ^(d)	Approved (13-117-LNG)	Under DOE Review (13-118-LNG)
Sabine Pass Liquefaction, LLC	0.86 Bcf/d ^(d)	Pending Approval (13-121-LNG)	Under DOE Review (13-121-LNG)
Delfin LNG LLC	1.8 Bcf/d	Pending Approval (13-129-LNG)	Under DOE Review (13-147-LNG)
Magnolia LNG, LLC	0.54 Bcf/d: FTA ⁽ⁱ⁾ 1.08 Bcf/d: Non-FTA ⁽ⁱ⁾	Pending Approval (13-131-LNG)	Under DOE Review (13-132-LNG)
Annova LNG LLC	0.94 Bcf / d	Pending Approval (13-140-LNG)	n/a
Texas LNG LLC	0.27 Bcf / d ^(d)	Pending Approval (13-160-LNG)	Under DOE Review (13-160-LNG)
Total of all Applications Received		38.23 Bcf/d (*) (**)	35.58 Bcf/d (*) (**)

Status Report

- DOE released its macro-economic study prepared by NERA Economic Consulting on December 3, 2012.
- The study has been available for a public comment period, which closed on January 24, 2013.
- A reply comment period closed on February 25, 2013.
- DOE issued four decisions since then.
- The Path forward?

Status Report (continued)

Pending Long-Term Applications to Export LNG to Non-FTA Countries Listed in Order DOE Will Commence Processing

Last Revised 12/6/13

Current Processing Position	Company	DOE/FE Docket No.
1	Cameron LNG, LLC	11-162-LNG
2	Jordan Cove Energy Project, L.P.	12-32-LNG
3	LNG Development Company, LLC (d/b/a Oregon LNG)	12-77-LNG
4	Cheniere Marketing, LLC	12-97-LNG
5	Excelerate Liquefaction Solutions I, LLC	12-146-LNG
6	Carib Energy (USA) LLC	11-141-LNG
7	Gulf Coast LNG Export, LLC	12-05-LNG
8	Southern LNG Company, L.L.C.	12-100-LNG
9	Gulf LNG Liquefaction Company, LLC	12-101-LNG
10	CE FLNG, LLC	12-123-LNG
11	Golden Pass Products LLC	12-156-LNG
12	Pangea LNG (North America) Holdings, LLC	12-184-LNG
13	Trunkline LNG Export, LLC	13-04-LNG
14	Freeport-McMoRan Energy LLC	13-26-LNG
15	Sabine Pass Liquefaction, LLC	13-30-LNG
16	Sabine Pass Liquefaction, LLC	13-42-LNG
17	Venture Global LNG, LLC	13-69-LNG
18	Eos LNG LLC	13-116-LNG
19	Barca LNG LLC	13-118-LNG
20	Sabine Pass Liquefaction, LLC	13-121-LNG
21	Magnolia LNG, LLC	13-132-LNG
22	Delfin LNG LLC	13-147-LNG
23	Waller LNG Services, LLC	13-153-LNG

Criteria DOE used to establish the processing order on December 5, 2012

DOE will begin processing all long-term applicants to export LNG to non-FTA countries in the following order:

- 1 All pending DOE applications, as of December 5, 2012, where the applicant has received approval from the Federal Energy Regulatory Commission (FERC), either on or before December 5, 2012, to use the FERC pre-filing process, in the order the DOE application was received.
- 2 Pending DOE applications, as of December 5, 2012, in which the applicant did not receive approval either on or before December 5, 2012, from FERC to use the FERC pre-filing process, in the order the DOE application was received.
- 3 DOE applications received after December 5, 2012, in the order the DOE applications are received.

Nuance or Policy Shift?

- In the Lake Charles order: “By granting LCE’s Application, DOE/FE will have cumulatively authorized non-FTA exports totaling 5.6 Bcf/d of natural gas, or 2.044 Tcf/yr, for the three final or conditional authorizations granted to date – Sabine Pass (2.2 Bcf/d), Freeport (1/4 Bcf/d), and LCE (2.0 Bcf/d). We note that, although this total export volume is not insignificant, it remains below the 6 Bcf/d volume of natural gas case evaluated by NERA in its ‘low’ export cases. Pages 125-126.

Nuance or Policy Shift? (continued)

- In the Dominion Cove Point order: “By authorizing exports of LNG in a volume equivalent to 0.77 Bcf/d of natural gas (281 Bcf/yr) in this proceeding, DOE/FE will have cumulatively authorized non-FTA exports totaling 6.37 Bcf/d of natural gas, or 2.325 Tcf/yr, for the on final and three conditional export authorizations granted to date – Sabine Pass (2.2 Bcf/d), Freeport (1.4 Bcf/d), Lake Charles Exports (2.0 Bcf/d), and the current authorization (0.77 Bcf/d). We note that this total export volume only moderately exceeds the 6 Bcf/d volume evaluated by NERA in its ‘low’ export cases.” Page 142.

Nuance or Policy Shift? (continued)

- In the Freeport LNG II order: “By conditionally authorizing exports of LNG in a volume equivalent to 0.4 Bcf/d of natural gas (146 Bcf/yr) in this proceeding, DOE/FE will have cumulatively authorized non-FTA exports totaling 6.77 Bcf/d of natural gas, or 2.471 Tcf/yr, for the one final and four conditional export authorizations granted to date – Sabine Pass (2.2 Bcf/d), Freeport I (1.4 Bcf/d), Lake Charles Exports (2.0 Bcf/d), Dominion Cove Point (0.77 Bcf/d), and the current authorization – Freeport II (0.4 Bcf/d). We note that this total export volume only moderately exceeds the 6 Bcf/d volume evaluated by NERA in its ‘low’ export cases.” Page 155.

Summary of the Decisions

- The Natural Gas Act creates a rebuttal presumption that the application are consistent with the public interest.
- The burden of overcoming the statutory presumption is on those opposing the application.
- The NERA study supports LNG exports as providing net benefits to the U.S. economy and is “fundamentally sound and supports the proposition that the proposed authorization would not be inconsistent with the public interest.”
- The authorizations were granted.

For more information visit:

www.lngfacts.org

The Center for Liquefied Natural Gas

Bill Cooper, President

(202) 289-2253