Appendix L

COAST GUARD LETER OF INTENT AND WATERWAY SUITABILITY REPORT

January 12, 2006

Commander David W. Murk
United States Coast Guard
100 W. Oglethorpe Avenue, Suite 1017
Savannah, Georgia 31401

Re: Letter of Intent Pursuant to 33 C.F.R. § 127.007
Southern LNG Inc. – Elba III Expansion Project

Dear Commander Murk:

Southern LNG Inc. respectfully notifies you of its intent to construct new facilities at the liquefied natural gas terminal on Elba Island ("**Elba Island Terminal**"). The project will expand the terminal to supply growing demand for clean energy with new LNG imports, in addition to the expansion currently underway and scheduled to commence service on February 1, 2006. This additional expansion ("**Elba III Project**"), will commence service in phases starting in mid-2010, after a construction period of approximately three years.

I.
INTRODUCTION

A description of the project and a map locating Elba Island appear in **Attachment 1** hereto. SLNG also submits, under separate cover, a preliminary waterway suitability assessment for the Elba III Project as specified in the United States Coast Guard's Navigational and Vessel Inspection Circular No. 05-05 ("**NVIC 05-05**").

Attachment 2 to this letter shows a draft schedule with dates imposed on the joint FERC-U.S. Coast Guard timeline from the Navigational and Vessel Inspection Circular No. 05-05 ("**NVIC 05-05**"). Although the draft schedule shows 8 months of prefiling, SLNG intends to commit resources in an effort to complete the prefiling process within the minimum of 6 months prescribed in the Energy Policy Act of 2005. SLNG welcomes any input your office may have in order to facilitate this effort.

The Elba III Project will improve marine and transfer facilities in the new marine slip to accommodate liquefied natural gas carriers ("**LNG/C**") with a wider range of dimensions and with greater scheduling flexibility. These improvements in the slip will enable SLNG to decommission the LNG unloading facilities on the existing riverside dock. The riverside dock will remain available as a lay berth for use in non-LNG/C service. The combination of improving the new marine slip and converting the riverside dock to a lay berth will enhance marine safety and eliminate the need for maintenance dredging those portions of the turning basin previously used only for LNG/C service at the riverside dock.

SLNG submits the enclosed information to comply with section 127.007 of your regulations and respectfully requests an LOR under section 127.009 on the suitability of your waterway for the Elba III Project. Shell NA LNG, LLC ("**Shell**") and BG LNG Services, LLC ("**BG**") have entered into agreements, subject to certain conditions precedent, with SLNG for capacity to import additional LNG through the Elba III Project, as described in the press releases in **Attachment 3** hereto. In support of its request for a favorable LOR, SLNG states as follows:

II.
OWNER AND OPERATOR
(33 CFR § 127.007(d)(1), (2))

The exact legal name of SLNG is Southern LNG Inc., a wholly owned subsidiary of Southern Natural Gas Company organized and existing under the laws of Delaware and having its principal place of business in the AmSouth Center, 1900 5th Avenue North, Birmingham, Alabama 35203. SLNG has owned and operated the Elba Island Terminal under the Captain of the Port's jurisdiction for almost thirty years.

III.
PHYSICAL LOCATION OF THE FACILITY
(33 CFR § 127.007(d)(3))

The terminal lies entirely on Elba Island, which SLNG owns and uses exclusively for this purpose.

IV.
DESCRIPTION OF THE FACILITY
(33 CFR § 127.007(d)(4))

The Elba Island Terminal is designed, and the Elba III Project has been designed, for marine receipt of LNG for storage, regasification, and delivery into the interstate natural gas pipeline system regulated by the FERC. The existing facilities were constructed in 1973-1978, recommissioned in 2000-2001, and expanded in 2003-2006.

Design and construction of the expansion facilities will adhere to regulatory and industry standards including the design and specifications of the existing facilities at the Elba Island Terminal, those adopted by the U.S. Department of Transportation's Research and Special Programs Administration and Coast Guard, the National Fire Protection Association, the Oil Companies International Marine Forum, and the Society of International Gas Tanker and Terminal Operators.

SLNG has demonstrated a commitment to operating safely. Consistent with Coast Guard regulations, SLNG has written operating, security and emergency procedures approved on several occasions by your office and has undergone numerous inspections by federal and state agencies in conjunction with past construction projects and actual operating experience. The expansion facilities will become integrated with the existing facilities and operating procedures and subject to the effective regulations and latest procedures approved by the Captain of the Port when operations commence following construction.

V.
LNG VESSEL CHARACTERISTICS AND FREQUENCY
(33 CFR § 127.007(d)(5))

SLNG operates the terminal on an open-access basis according to FERC regulations that govern service to LNG suppliers. SLNG does not import LNG. Suppliers, primarily Shell and BG, using the terminal's capacity will import the LNG and arrange for transportation to the Elba Island Terminal and for authorizations to import to, and use the waterways of, the U.S. SLNG's tariff conditions service on suppliers' complying with all safety requirements before SLNG will accept a shipment. As your office is intimately aware, SLNG unloaded 55 shipments between 1978 and 1980 and, since recommissioning in 2001, has unloaded over 120 shipments. SLNG expects the annual number and frequency of shipments to increase with the expansion going in service on February 1, 2006 and again when the Elba III Project commences in 2010.

The Elba III Project will enable SLNG to accommodate a greater range of LNG ships with the following modifications:

- SLNG will upgrade the existing LNG transfer facilities at the Elba Island Terminal to provide for the ability for simultaneously unloading two LNG carriers each at a rate of approximately 50,000 gallons per minute.

- SLNG will adjust the berthing configuration in the marine slip to receive LNG carriers having dimensions as large as the following approximations: 345 meters length overall, 55 meters breadth, 12 meters design laden draft, and 177,000 metric tons displacement.

In addition, SLNG proposes to remove the following facilities from the riverside dock for the purpose of decommissioning its LNG transfer capability and reducing maintenance dredging requirements:

- LNG transfer header;
- Vapor return line;
- Ship bunker line;
- Fire protection equipment;
- LNG unloading arms, vapor return arm, pedestals, and ancillary equipment.

VI.
WATERWAY AND AREA CHARTS
(33 CFR § 127.007(d)(6))

If necessary, SLNG will supplement this letter with any navigational information your office requests.

VII.
SUITABILITY OF SAVANNAH RIVER
(33 CFR § 127.009)

Since the Elba Island Terminal was recommissioned, your office has issued two favorable LORs to SLNG for the same kind of operations as proposed herein for the Elba III Project. For your convenience, I have included those LORs in **Attachment 4**.

VIII.
CONCLUSION

For the reasons discussed above, SLNG asks that you initiate the Coast Guard's process for reviewing the Elba III Project, participate in the FERC's prefiling process, and work with SLNG's staff at Elba Island to obtain any additional information needed to issue an LOR supporting the suitability of the Savannah River for the planned expansion. To expedite our efforts, please work directly with Chris Humes (912/944-3833) and DaWayne Penberthy (912/944-3815) at Elba Island.

Very respectfully yours,

SOUTHERN LNG INC.

James D. Johnston
Senior Counsel
Southern LNG Inc.
1900 Fifth Ave. N., Office 2938
Birmingham, Alabama 35203
(205) 326-2019
james.johnston@elpaso.com

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Attachment 1

PROJECT INFORMATION

Non-Internet Public

DRAFT ENVIRONMENTAL IMPACT STATEMENT FOR THE PROPOSED ELBA III PROJECT
Docket Nos. CP06-470-000, CP06-471-000, CP06-472-000, CP06-473-000, and CP06-474-000

APPENDIX L

COAST GUARD LETTER OF INTENT AND WATERWAY SUITABILITY REPORT

Page 8
Attachment I - Project Information

Public access for the above information is available only through the Public Reference Room, or by e-mail at public.referenceroom@ferc.gov.

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Attachment 2

“Pre-Filing” Timeline

TIMELINE FOR PROCESS
"Pre-Filing" Option
Elba III Expansion / Elba Express Pipeline

EIII/EEC	FERC's timeline		Month	USCG's timeline	
	Applicant:	FERC:		Applicant:	COTP/FMSC:
			-9	**Submit LOI & Preliminary WSA** (at same time as Pre-Filing)	**Start LOR process & review of Preliminary WSA**
1/13/2006 >	**Pre-Filing** (7-9 months before filing)	Start EIS process	-8		
			-7		
8* mos			-6		
			-5		
			-4		
			-3		
			-2		
			-1		
9/21/2006 >	**Filing**		0	**Submit Follow-on WSA**	**Review/Validation of Follow-on WSA**
			1		
4 mos			2		
			3		**Issue Waterway Suitability Report to FERC**
1/19/2007 >		**Issue Draft-EIS**	4		
			5		
4			6		
			7		
5/23/2007 >		**Issue Final-EIS**	8		**Issue LOR** (anytime after Final EIS issued)
2			9		
7/26/2007 >		**Issue Final Order** (10-12 months after Filing)	10		
			11		
			12		

*** EEC and SLNG intend to commit resources to reduce the prefiling process to the statutory minimum of 6 months.**

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Attachment 3

Press Releases

news

El Paso Corporation Announces Elba Island Expansion and Related Pipeline Project

HOUSTON, Dec. 21 /PRNewswire-FirstCall/ -- El Paso Corporation (NYSE: EP) announced today that wholly owned subsidiaries will proceed with two projects -- the next expansion at the Elba Island LNG Receiving Terminal near Savannah, Georgia, and the construction of a related Elba Express Pipeline in Georgia -- to significantly expand the company's natural gas delivery capabilities in the Southeastern United States. The initial in-service date is expected to be mid-2010 and total expected capital cost of the two projects is approximately $850 million.

First, El Paso plans to further expand its Elba Island liquefied natural gas (LNG) receiving terminal near Savannah, Georgia. The Phase III expansion will add 8.4 billion cubic feet (Bcf) of LNG storage, which will more than double Elba's storage capacity to 15.7 Bcf. The expansion will also add .9 Bcf per day (Bcf/d) of send-out capacity, raising Elba's capacity to 2.1 Bcf/d. In addition, the unloading docks at the terminal will be modified to accommodate new, larger LNG ships. The Phase III expansion is in addition to the Phase II expansion of Elba Island that is expected to be in service February 2006.

Second, an El Paso subsidiary will also construct, own and operate a new 191-mile interstate natural gas pipeline with a total capacity of 1.1 Bcf/d. The new pipeline, Elba Express, will increase natural gas transportation capacity from Elba Island to markets in Georgia and through interconnections with other pipelines to the Southeastern and Eastern United States. Elba Express will run northwest, interconnecting with pipelines and customers along its route. The pipeline will consist of about 105 miles of 42-inch pipeline and 86 miles of 36-inch pipeline.

Shell NA LNG LLC (Shell), a subsidiary of Royal Dutch Shell (NYSE: RDS.A & RDS.B), and BG LNG Services, LLC, a wholly owned subsidiary of BG Group plc (NYSE: BRG.N), have entered into long-term agreements for the incremental storage and send-out capacity of the Elba Island Phase III expansion and for the transportation capacity on the new Elba Express pipeline. These agreements are subject to qualifying conditions including regulatory approval, and El Paso will submit applications to the FERC for the two projects in the third quarter of 2006. Shell intends to use its capacity to primarily import LNG from Qatar through its Qatargas IV project, also announced today. BG, the sole importer of LNG at Elba Island now, will continue to source LNG from its portfolio of existing and future supply sources in the Atlantic Basin, including Trinidad, Egypt and Equatorial Guinea.

In announcing the expansions, Doug Foshee, president and chief executive officer of El Paso, said, "The Elba Island expansion and Elba Express pipeline show El Paso's commitment to expand our premier natural gas infrastructure franchise to meet the country's growing energy needs. By doubling the size of our Elba Island terminal and expanding our delivery capability from the terminal, we are significantly improving the natural gas supply picture in the Southeastern United States, and doing so together with Shell and BG Group, two of the largest players in the worldwide LNG business. These expansions will increase both the market's access to diverse and non-traditional supplies and the suppliers' access to the fast-growing Southeast markets and beyond."

El Paso Corporation provides natural gas and related energy products in a safe, efficient, and dependable manner. The company owns North America's largest natural gas pipeline system and one of North America's largest independent natural gas producers. For more information, visit http://www.elpaso.com/elba/mediakit.shtm.

Cautionary Statement Regarding Forward-Looking Statements

This release includes forward-looking statements and projections, made in reliance on the safe harbor provisions of the Private Securities Litigation Reform Act of 1995. The company has made every reasonable effort to ensure that the information and assumptions on which these statements and projections are based are current, reasonable, and complete. However, a variety of factors could cause actual results to differ materially from the projections, anticipated results or other expectations expressed in this release, including, without limitation, our ability to obtain all necessary regulatory approvals and to successfully construct and operate the proposed facilities described in this release; general economic conditions in geographic regions or markets served by El Paso Corporation and its affiliates, or where operations of the company and its affiliates are located, and other factors described in the company's (and its affiliates') Securities and Exchange Commission filings. While the company makes these statements and projections in good faith, neither the company nor its management can guarantee that anticipated future results will be achieved. Reference must be made to those filings for additional important factors that may affect actual results. The company assumes no obligation to publicly

update or revise any forward-looking statements made herein or any other forward-looking statements made by the company, whether as a result of new information, future events, or otherwise.

Contacts
Investor and Public Relations
Bruce L. Connery, Vice President
Office: (713) 420-5855

Media Relations
Bill Baerg, Manager
Office: (713) 420-2906

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News & Media releases

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Shell adds major liquefied natural gas supply and regasification projects to its global portfolio

21 Dec 2005

Royal Dutch Shell plc (Shell) today announced two major additions to its global Liquefied Natural Gas (LNG) portfolio. In Qatar, the company has joined forces with Qatar Petroleum (QP) in the development of the large scale Qatargas 4 LNG project, while in the United States Shell has agreed to acquire additional capacity at the Elba Island LNG import terminal in Georgia.

Speaking from Doha in Qatar at the award of the Engineering, Procurement and Construction (EPC) contract for the Qatargas 4 project, Linda Cook, Shell Executive Director of Gas and Power said, "We are honoured to join Qatar Petroleum in partnership for the Qatargas 4 LNG venture. The project will contribute to Shell's goal of growing our natural gas production and reserves position, as well as to increased security and diversity of natural gas supply to North America."

Qatargas 4 is Shell's seventh global LNG supply project and reaffirms the company's leadership position amongst international oil companies in the global LNG business.

An integrated upstream and LNG project, Qatargas 4 will produce 1.4 billion cubic feet per day of natural gas, including an average of approximately 70 thousand barrels per day of associated natural gas liquids from Qatar's North Field over the 25 year life of the project. The project also includes a 7.8 million tonnes-per-annum (mtpa) liquefaction plant and related LNG shipping capability. Qatargas 4 is a joint venture between Qatar Petroleum (70 percent) and Shell (30 percent). The majority of the LNG will be delivered to the growing natural gas market in North America. LNG deliveries are expected to commence around the end of the decade.

Shell's LNG equity sales in 2004 were 10.15 million tonnes from projects in Nigeria, Malaysia, Brunei, Oman and Australia. Three new LNG trains are currently nearing start-up, within budget and schedule expectations, in Oman and Nigeria. Good construction progress is being made on additional new trains in Australia, Russia and Nigeria for start up in the coming years. Now, with the addition of Qatargas 4, Shell's equity LNG production capacity is expected to approximately double by the end of the decade.

Shell also announced today that it has reached agreement with Southern LNG Inc., a wholly owned subsidiary of El Paso Corporation's Southern Natural Gas Company (SNG), to acquire additional capacity at the Elba Island LNG import terminal in Georgia in the United States. In addition Shell has reached agreement with Elba Express Pipeline Company LLC, a wholly owned subsidiary of SNG, to acquire capacity in a new natural gas pipeline. Both projects will be filed with the U.S. Federal Energy Regulatory Commission (FERC) for approval in the third quarter of 2006. The intention is that this capacity will be utilised to import Qatargas 4 volumes into natural gas markets in the eastern United States.

The deal with El Paso will further strengthen Shell's LNG import position in North America. In addition to Elba Island, Shell has capacity rights at the existing Cove Point LNG terminal in Maryland and in the Altamira LNG terminal under construction on Mexico's east coast. Shell also has capacity rights at the Energia Costa Azul terminal currently under construction on the Pacific coast of Mexico.

LNG supplies for these projects are planned from Shell's portfolio of existing and future LNG projects.

Linda Cook added, "With global demand for LNG expected to double this decade, the addition of Qatargas 4 and additional Elba Island capacity to Shell's global portfolio of LNG assets will further strengthen our leading industry position in this exciting sector."

Related links

Shell Gas & Power - opens in new window

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Press Release

Source: BG Group PLC

BG Group and Southern Natural Gas Company Enter Agreement to Further Expand the Elba Island LNG Import Terminal

Wednesday December 21, 9:00 am ET

HOUSTON--(BUSINESS WIRE)--Dec. 21, 2005--BG LNG Services, LLC (BG) a wholly owned subsidiary of BG Group PLC (NYSE:BRG - News), today announced that it has entered into agreements with two wholly owned subsidiaries of El Paso Corporation to further expand the storage and throughput capacity at the Elba Island liquefied natural gas (LNG) terminal and to participate in a new interstate pipeline -- Elba Express. The expansion and new pipeline will benefit the southeastern U.S. by adding more LNG import capacity directly into the market area. Both projects will be filed with the U.S. Federal Energy Regulatory Commission (FERC) for approval in the third quarter of 2006.

The expansion of Elba Island will increase BG's storage capacity from 4.0 billion cubic feet (bcf) to 8.2 bcf and will increase BG's vaporization capacity from 675 million cubic feet per day (mmcfd) to 1.17 billion cubic feet per day. The expansion is expected to be completed before the end of 2012.

As part of the expansion project, BG also entered into an agreement with SNG for transportation capacity on the recently announced Elba Express Pipeline. This new 191-mile interstate natural gas pipeline will allow BG to deliver natural gas from Elba Island to additional markets in Georgia and, through interconnections with other pipelines, to the southeastern and eastern United States.

Martin Houston, BG executive vice president and managing director, North America, Caribbean and Global LNG, said, "The United States is one of our core markets and this agreement once again demonstrates BG's commitment to increasing LNG supply to the U.S. We have a clear market strategy which will continue to drive growth in our North American business."

There are matters discussed in this media information that are forward-looking statements. Such statements are only predictions and actual events or results may differ materially. For a discussion of important factors which could cause actual results to differ from the forward-looking statements, refer to the Company's annual report and accounts for the year ended 31 December 2004.

Notes to Editors:

BG Group PLC is a global natural gas business. Active on five continents in over 20 countries, it operates four business segments -- Exploration and Production, LNG, Transmission and Distribution and Power.

In the USA, BG LNG Services, LLC, holds, through 2023, 100% of the capacity rights at North America's largest operating LNG importation terminal, Lake Charles in Louisiana. This has the capability to receive, store, vaporise and deliver an average daily send out of 1.2 billion cubic feet per day (bcfd). Expansion work is scheduled to increase the average send-out rate to 1.8 bcfd by mid-2006. Additionally, BGLS currently holds supply and regasification rights of 675 mmcfd for 22 years at the Elba Island LNG terminal near Savannah, Georgia. BG's website: www.bg-group.com

Contact:

BG Group PLC
Communications, 713-599-4009
or
After-hours media, 832-213-9082 (cell)
or
Investor Relations
Chris Lloyd or Helen Parris
or Kate Bingham, +44 (0) 118 929 3025

Source: BG Group PLC

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Attachment 4

Letters of Recommendation

U.S. Department of Transportation
United States Coast Guard

Commanding Officer
USCG Marine Safety Office Savannah
Juliette Gordon Low Federal Building
100 W. Oglethorpe Avenue, Suite 1017
Savannah, GA 31401

www.uscg.mil/d7/units/mso-savannah
Staff Symbol: Admin
Phone: (912) 652-4353
FAX: (912) 652-4180

16610
30 May 2002

Mr. James D. Johnston
Council
Southern LNG Inc.
P.O. Box 2563
Birmingham, AL 35202-2563

Dear Mr. Johnston:

This letter of recommendation has been prepared in response to your 7 May 2002 letter of intent to construct new facilities at the Liquefied Natural Gas (LNG) terminal on Elba Island. This letter of recommendation satisfies the Coast Guard's obligation under title 33, part 127, section 009, of the Code of Federal Regulation, regarding the suitability of the Savannah River for expanded LNG marine traffic.

Subject to the marine safety and security provisions outlined in your letter of intent, the Savannah River, as far upriver as the westernmost extent of the Elba Island facility moorings, is recommended as suitable for expanded LNG marine traffic. As stated in my prior letter of recommendation dated 25 July 2001, all reaches of the Savannah River beyond or upriver of this point are not suitable for LNG marine traffic. It is important to note that this Coast Guard recommendation is contingent upon Southern LNG implementing specific initiatives which reduce the overall level of risk associated with LNG tankship operations. These enhancements will be necessary to offset the increase in risk exposure associated with the proposed increase in LNG tankship arrivals and transits. Implementation of the following, as outlined in your letter of intent, will be absolutely necessary:

- Relocation of the primary LNG mooring facilities in order to significantly reduce the risk of allision and the subsequent breaching of an LNG tankship's cargo tank. This berth must be located at such a position and angle to minimize the probability of an allision scenario developing and to mitigate the potential consequences should an allision event ever occur.

- The newly proposed berth must be designed to eliminate all but "emergency use" of the existing riverside mooring facilities. This may be accomplished by building redundant capability in the new berth or by incorporating "fail safe" operating restrictions. The objective is to ensure that the overall level of risk associated with LNG marine operations is reduced. With the proposed expansion essentially doubling the maximum number of tankship arrivals and transits, the only way this is possible is to remove the risk associated with operations at the current berth. A dramatic increase in tankship arrivals coupled with even partial use of the riverside berth is not acceptable.

16610
30 May 2002

Should you have questions regarding this letter of recommendation, please contact Lieutenant Commander Darnell Baldinelli at extension 230 of the number listed above.

Sincerely,

J. L. McDONALD
Commander, U.S. Coast Guard
Captain of the Port, Savannah

Copy: Federal Energy Regulatory Commission, Attn: Mr. Robert K. Arvedlund
U.S. Army Corps of Engineers
Georgia Department of Transportation
Chatham Emergency Management Agency
SC Department of Health & Environmental Quality

U.S. Department of Transportation
United States Coast Guard

Commanding Officer
United States Coast Guard
Marine Safety Office

100 W. Oglethorpe Ave. Suite 1017
Savannah, GA. 31401
Staff Symbol: COTP
Phone: (912) 652-4353
FAX: (912) 652-4180

16611

JUL 25 2001

James D. Johnson
Council
Southern LNG Inc.
Post Office Box 2563
Birmingham, AL35202-2563

Dear Mr. Johnson:

This letter is in response to your letter of intent to transfer liquefied natural gas (LNG) at the waterfront facility on Elba Island ("Elba Island Terminal") submitted by Southern LNG Inc. on 2 July 2001. This letter of recommendation satisfies the Coast Guard's obligation under title 33, part 127 section 009, of the Code of Federal Regulations regarding the suitability of the Savannah River for LNG marine traffic.

The Savannah River, as far upriver as the westernmost extent of the Elba Island LNG facility moorage, is recommended as suitable for LNG marine traffic. This recommendation is contingent upon completion of preparatory tasks as specified in your letter of intent. Of special interest are:

- The completion of dredging of the Elba Island Terminal berth to a depth adequate to provide the appropriate under keel clearance for vessels expected to call at that facility; and,

- That the new turning basin be completed adjacent to the berth. As an interim measure, for the cool down load only, a combination of dredging of the old turning basin and the proposed new turning basin that accommodates the safe turning of the LNG vessel will suffice. As the intent of the new turning basin is also to provide additional navigating area for passing vessels to give way to moored LNG vessels, the new turning basin will be required to be completed before routine LNG vessel terminal operations can be recommended.

The Savannah River upriver from the westernmost extent of the Elba Island LNG facility moorage is not recommended as suitable for LNG marine traffic. I note that the only reason for an LNG vessel to transit past this point is to use the King's Island turning basin. This is not recommended for two reasons. First, such transit would require passing in close proximity to population centers, including the City of Savannah, Georgia. As noted in the Federal Energy Regulatory Commission's Environmental Assessment for the Elba Island Terminal, dated April 2001, the potential hazard to the general public posed by the LNG tanker route to Elba Island is minimal due to the route being generally remote from population centers. Extending the route beyond Elba Island would likely invalidate that assessment. Second, that an LNG vessel transit

through this area would adversely impact all other marine traffic in the Savannah River, by requiring the use of extensive operational controls.

Should you have questions regarding this letter of recommendation, please contact Lieutenant Darnell Baldinelli at extension 230 of the number above.

J. L. McDONALD
Commander, U.S. Coast Guard
Captain of the Port

Copy: Federal Energy Regulatory Commission
U. S. Army Corps of Engineers
Georgia Department of Transportation
Chatham County Emergency Management Agency
South Carolina Department of Health and Environmental Quality

U.S. Department of Homeland Security
United States Coast Guard

Commanding Officer
United States Coast Guard
Marine Safety Unit

Juliette G. Low Federal Bldg.
100 W. Oglethorpe Ave., Ste. 1017
Savannah, GA 31401
Phone: (912) 652-4353
Fax: (912) 652-4180

16611

Director of Gas – Environmental & Engineering, PJ-11
Attn: Larry Sauter
Federal Energy Regulatory Commission
888 First Street, NW
Washington, DC 20426

Dear Mr. Sauter:

I have completed a review of the Waterway Suitability Assessment (WSA) for the Elba III Terminal Expansion Project submitted by Southern LNG on 20 Sept 06. This review is based on consultation with various port stakeholders including the Savannah Pilots Association, the Savannah Maritime Association, towing industry representatives, emergency service agencies, waterfront facilities, and select members of the Area Maritime Security Committee. As a result of this review and consultation, I have determined that the Savannah River is suitable for the increase in LNG marine traffic associated with this expansion. As outlined in the WSA, there is sufficient capability within the port community to responsibly manage the safety and security risks introduced by this expansion project; however, I do feel there is an opportunity to even better manage these risks. I am including a Waterway Suitability Report along with the WSA that provides an overview of the process including the safety and security assessment, risk management strategies, potential resource requirements and recommendations to further reduce security risks to LNG vessels. The supplementary report and the WSA are being provided to you under the terms and conditions for handling Sensitive Security Information.

For further information, please contact Mr. Charlie Johnson at (912) 652-4353.

Sincerely,

D. W. Murk
Commander, U. S. Coast Guard
Captain of the Port

Encl: (1) Waterway Suitability Report
(2) SSI Supplement
(3) Waterway Suitability Assessment – Elba III Terminal Expansion Project

Copy: CCGD7(p)
LANTAREA(p)
CEU Miami

U.S. Department of Homeland Security

United States Coast Guard

Waterway Suitability Report: Proposed Expansion of the Southern LNG facility on Elba Island, Georgia

Prepared by:
U. S. Coast Guard, Captain of the Port Savannah

Date: 8 Jan 07

1. INTRODUCTION

This document constitutes the United States Coast Guard Captain of the Port Savannah's (COTP Savannah) Waterways Suitability Report (WSR) for the proposed Phase III expansion to Southern LNG's Liquefied Natural Gas (LNG) Facility on Elba Island. This Waterways Suitability Report meets the intent of paragraph 6.b. of U.S. Coast Guard Navigation and Vessel Inspection Circular (NVIC) 05-05. NVIC 05-05 establishes Coast Guard policy for assessing the suitability of a waterway to support LNG carrier traffic.

1.1 Background

COTP Savannah and Southern LNG have a history of working cooperatively on LNG regulatory issues for operating and expanding LNG facilities in accordance with 33 CFR Part 127. The following timeline provides a general overview of historical filings from Southern LNG and COTP Savannah's response.

- 2 July 2001 – Southern LNG submitted a Letter of Intent notifying COTP Savannah of plans to recommission the LNG transfer terminal on Elba Island. The recommissioning included installing new LNG pumps and piping; upgrading the fire protection, hazard detection, and intrusion prevention systems; modernizing the control systems; and re-establishing the vessel berth along the Savannah River.

- 25 July 2001 – COTP Savannah issued a letter of recommendation stating that the Savannah River, as far upriver as the westernmost extent of the LNG facility, is suitable for LNG marine traffic. This letter of recommendation was contingent upon the completion of dredging at the Southern LNG's berth to comply with under-keel clearance guidelines and that a new turning basin be established adjacent to the berth to accommodate safe turning of LNG vessels and increase safe water for passing vessels.

- 7 May 2002 – Southern LNG submitted a Letter of Intent to expand their existing facility to include the relocation of LNG unloading operations to a new marine slip with the capability to accommodate two vessels, a fourth LNG storage tank, and additional piping and send-out facilities.

- 30 May 2002 – COTP Savannah issued a letter of recommendation stating that the Savannah River, as far upriver as the westernmost extent of the LNG facility, is suitable for expanded LNG marine traffic. In accordance with Southern LNG's Letter of Intent, this recommendation was contingent upon relocating the primary LNG mooring facilities to reduce the risk of passing vessels alliding with a moored LNG tankship and designing this new berth to eliminate all but emergency use of the existing riverside mooring.

- 12 January 2006 – Southern LNG submitted a Letter of Intent to conduct a facility expansion that would more than double storage tank capacity, increase the facility's vaporization capability, and modify the terminal's LNG tanker berthing and unloading facilities to accommodate larger tankers and provide faster and simultaneous unloading of two LNG tankers.

Upon receipt of Southern LNG's Letter of Intent, COTP Savannah initiated action in accordance with NVIC 05-05 to assess the Savannah River's suitability for another increase in LNG marine traffic.

1.2 COTP Role

The Federal Energy Regulatory Commission (FERC) conducts environmental, safety, and security review of LNG plants and related pipeline facilities, and as the lead federal agency for the process of authorizing the siting, construction, and operation of such facilities, prepares the overall National Environmental Policy Act (NEPA) documentation. In accordance with an Interagency Agreement between FERC and the Coast Guard, the Coast Guard is a cooperating agency with FERC under the NEPA process, and will be providing input to FERC throughout the licensing process. The Coast Guard exercises regulatory authority over LNG facilities which affect the safety and security of port areas and navigable waters under Executive Order 10173, the Magnuson Act, the Ports and Waterways Safety Act of 1972, as amended, and the Maritime Transportation Security Act of 2002. The Coast Guard is responsible for matters related to navigation safety, vessel engineering and safety standards, and all matters pertaining to the security of facilities or equipment located in or adjacent to navigable waters. The Coast Guard also has authority for LNG facility security plan review, approval and compliance verification as provided in 33 CFR Part 105.

1.3 Public Comment

On April 10, 2006, COTP Savannah and FERC hosted an open meeting to allow for public comment on Southern LNG's proposed terminal expansion. The meeting announcement was disseminated to all port stakeholders on April 3, 2006 through a Marine Safety Information Bulletin and was discussed in a variety of port outreach forums leading up to the event. COTP Savannah also issued a press release informing the public of the meeting and outlining the process to submit comments on the project. The public meeting was covered by the Savannah Morning News (area newspaper) and the local NBC and CBS news affiliates.

The public meeting was attended by approximately 30 people, with a majority of the public comment focusing on Right-of-Way issues surrounding the over 188 miles of additional pipeline. COTP Savannah did receive several comments from maritime stakeholders on the economic impacts associated with an increase in LNG vessel traffic due to delays associated with schedule changes for LNG arrivals and the Regulated Navigation Area (RNA) requirements. Because the Waterway Suitability Assessment focuses on the safety and security aspects of LNG deliveries, FERC required that Southern LNG conduct a more detailed economic impact study as part of

Resource Report Number 5 of the Environmental Impact Statement (EIS). However, as part of the regulatory process for the revised RNA, the Coast Guard completed an economic review and determined the regulation did not pose a "significant impact".

1.4 WSA Group

The WSA participants included members of the port community from maritime industry and government agencies including the Coast Guard, U.S. Customs and Border Protection, local fire and police departments, the Georgia Ports Authority, the Savannah River Pilots Association, local towing companies, the Savannah Maritime Association, and a handful of other stakeholders. Southern LNG contracted AcuTech Consulting Group to facilitate the WSA process. A full listing of participants can be found in Section 1.4 of the WSA.

2. PORT AND LNG ROUTE CHARACTERIZATION

2.1 The Port of Savannah

The Port of Savannah, Georgia (Port ID # 16923, UN Locator Code USSAV) includes all waters and adjacent waterfront from the entrance of the Savannah River upstream to the US Route 17 (Houlihan) Highway Bridge located at river mile 21.3 including the cities of Savannah, Garden City, and Port Wentworth. The Savannah River is navigable for deep-draft vessels to the upper end of Savannah Harbor, 19 miles above the outer ends of the entrance jetties, and for barges to the city of Augusta, 172 miles above the entrance.

The Port of Savannah is one of the nation's fastest growing ports and a major contributor to the economy of the state of Georgia and the southeastern United States. With the recently completed expansion of Garden City Terminal's Container Berth 8, the continued expansion of the Liquefied Natural Gas facility on Elba Island, the deepening projects for the Savannah River, and the general growth of many other waterfront facilities, the Port of Savannah will continue to expand well into the foreseeable future. The Port of Savannah is currently the nation's fourth largest container port and second largest on the east coast, with import and export numbers increasing annually. Other major products and industries of the port include petroleum products, kaolin clay, wood pulp, and various chemicals. The port is also 1 of 13 strategic ports in the United States and is regularly used to assist in the mobilization of the Army's 3rd Infantry Division. The Savannah Riverfront is a downtown historic area with considerable tourist and entertainment activity, especially during St. Patrick's Day where over 200,000 visit Savannah for celebration festivities.

The Port of Savannah is serviced by rail (CSX and Norfolk Southern) with a short line (Rail Link) connecting them. An Inter-modal Container Transfer Facility (ICTF) allows containers to be offloaded from vessels and taken directly to train cars at Garden City Terminal, either by a top-lift or on a chassis or flatbed trailer. These containers can be in Atlanta within 12 hours of their arrival in the port. The Port of Savannah also has immediate access to the I-95 corridor allowing for rapid distribution of goods along the eastern seaboard.

The Port of Savannah averages approximately 10 deep draft vessel arrivals per day.

2.2 LNG Tanker Route on the Savannah River

For LNG tankships, the transit from the Savannah River Sea Buoy (Tybee Lighted Buoy T) to the Southern LNG facility is 18 miles, with Southern LNG being the first facility a deep draft vessels encounter during inbound transit. The entrance to the Savannah River (Gated Buoys 1 and 2) is 600 feet wide and dredged and maintained to a depth of 44 feet at mean low water. These waterway dimensions remain in place until Tybee Knoll Range (Buoys 17 and 18), where the width of the channel decreases to 500 feet and the depth is dredged and maintained to 42 feet at mean low water. These dimensions remain in place from Tybee Knoll Range to the LNG facility on Elba Island.

Other than Tybee Island, both sides of the river from its mouth to Elba Island are generally undeveloped and consist of marsh, dredged material disposal sites, and other uninhabited waterfront areas. There is typically either a sand or hard sand bottom on both the north and south banks of the river, with an average 7.5 foot tidal range and regular ebb currents upwards of 3 knots. The transit for any vessel entering the Savannah River requires passage by the Tybee National Wildlife Refuge and Fort Pulaski National Monument.

3. SAFETY AND SECURITY ASSESSMENT

3.1 Det Norske Veritas (DNV) Consulting Report on Larger Tankships

The Sandia Laboratory Report on risks associated with LNG spills over water serves as the Coast Guard's foundation for LNG safety and establishes zones of concern for consequence management following accidental or intentional LNG releases. However, the Sandia Report is based on LNG tankships with a capacity of 125,000 m^3 and does not sufficiently address potential risks associated with the future generation of LNG carriers. As part of this expansion project, Southern LNG will have the capability to offload Q-Max LNG carriers with a capacity of 266,000 m^3.

Because of the discrepancy between the Sandia Report and Southern LNG's proposal for future operations, COTP Savannah required that Southern LNG conduct a site-specific analysis as part of the WSA to account for these future generation tankships. Based on this requirement, Southern LNG contracted DNV Consulting to perform a vulnerability evaluation and consequence analysis for Q-Max LNG tankships with cargo capacities up to 266,000 m^3. Before beginning the analysis, members of Southern LNG met with the Coast Guard Headquarters Office of Operating and Environmental Standards to discuss the overview of the modeling and analysis requirements to address in the study to receive Coast Guard acceptance.

The vulnerability evaluation was divided into two components:

1. Qualitative comparison of particulars for different size LNG carriers.

2. Collision vulnerability analysis to determine side impact energies that can be absorbed for different sized LNG carriers before deformation of the tank shell is initiated.

The consequence analysis was divided into four components:

1. A comparison of the potential spill volumes and initial liquid height of LNG for a Q-Max tankship versus those assumed in the Sandia Report.
2. A summary of historic atmospheric and meteorological data for Elba Island, Georgia.
3. Model vapor cloud and pool fire scenarios for a Q-Max LNG carrier under site specific conditions for both accidental and intentional breach sizes as outlined with a results comparison to the Sandia Report.
4. Model vapor cloud and pool fire scenarios under site specific weather conditions based on Coast Guard recommendations.

To model the relevant dispersion and flammable scenarios, DNV utilized PHAST (Process Hazard Analysis Tool Software), a commercial-use software package designed to comply with Dutch Yellow Book, US EPA, and UK HSE regulations. DNV ran multiple pool fire and vapor cloud scenarios with variable hole sizes (intentional and accidental), number of tanks breached, LNG discharge rates, atmospheric conditions, and the distances to Lower Flammable Limits. Based on these inputs, PHAST calculated updated Zones of Concern in alignment with the Sandia Report and Southern LNG incorporated them into the WSA.

Prior to submission, DNV satisfactorily validated their results through comparison with scientifically accepted experimental LNG trials. On September 6, 2006, Southern LNG submitted the DNV report entitled *Elba Island: Approach to LNG Consequence Modeling* to the Coast Guard Headquarters Office of Vessel and Facility Operating Standards for evaluation and official acceptance. On September 25, 2006, Coast Guard Headquarters responded via letter that the DNV report is "acceptable for addressing the modeling gaps that exist between the quantities of LNG carried on vessels included in the Sandia Report of December 2004 and those of future LNG carriers currently being designed and considered for use in conjunction with the expansion project at Elba Island."

3.2 WSA Process Overview

The WSA group divided the LNG tanker route into six segments to evaluate safety and security risks offshore and along the Savannah River:

Segment 1 - Pilot Boarding Area to Gated Buoys 1 and 2
Segment 2 - Gated Buoys 1 and 2 to Gated Buoys 17 and 18
Segment 3 - Gated Buoys 17 and 18 to Gated Buoys 24 and 25
Segment 4 - Gated Buoys 24 and 25 to Elba Island Facility Slip
Segment 5 - LNG Carrier moored within the slip at Elba Island
Segment 6 - Outbound from Elba Island to Gated Buoys 1 and 2 following offload (less than 5% heel remains)

The Zones of Concern from the DNV Report were overlaid along each segment of the transit route to evaluate risk factors and vulnerabilities, as well as potential impacts to population centers, critical infrastructure, and the environment.

3.3 Population Centers

The WSA group used 2000 census data to identify population areas potentially affected by the Zones of Concern along each transit route segment as outlined on page 11 of the WSA. Two of the affected census tracts (Tracts 111.04 and 111.05) have a Medium average population density as per NVIC 05-05; however, the population centers for both of these tracts are located outside the Zones of Concern. The portions of each tract within the Zones of Concern have minimal to no residential areas and were considered low population density areas by the WSA group.

The census data also indicated that Tract 111.03 (Tybee Island) was a low population density area. Although this may be true for year-round residents, the WSA group considered Tract 110.03 a Medium population density area based on the high recreational use of Tybee Island during the summer months. Tract 111.03 is located in Segment 3 of the LNG tanker route and impacted by both Zones 2 and 3.

3.4 Critical Infrastructure

The Zones of Concern were overlaid along the Savannah River to determine possible impacts to critical infrastructure identified in the Area Maritime Security (AMS) Plan for the Savannah COTP Zone. The results of this evaluation are outlined in the Sensitive Security Information supplement to this report.

3.5 Security

Once the potentially effected areas along the transit route were established, the WSA group evaluated both intentional and accidental LNG releases using the threat and attack scenarios recommended in Enclosure (3) to NVIC 05-05.

These scenarios were evaluated against five risk variables - Consequences, Likelihood, Threat, Vulnerability, and Target Attractiveness – to identify the areas of highest risk and develop possible risk management strategies. The WSA group evaluated each segment of the transit route individually, using the risk variables to reach a conclusion of high, medium, or low risk for each scenario. The results of this assessment are outlined in the Sensitive Security Information supplement to this report.

4. RISK MANAGEMENT STRATEGIES

There are a number of proven safeguards in place for today's LNG marine traffic on the Savannah River that will remain in place following the proposed expansion. As port-wide

experience with LNG deliveries has increased, these safeguards have been evaluated through discussions with port stakeholders and updated to maintain safety and security risk mitigation while minimizing impact to port mobility.

4.1 Risk Management Strategies In Place

4.1 Regulated Navigation Area (RNA)

When Southern LNG was recommissioned in 2001, COTP Savannah instituted a Regulated Navigation Area (33 CFR Part 165.756) outlining the requirements for all vessels transiting the Savannah River when an LNG tankship is within the geographic limits of the RNA (the Savannah River between Fort Jackson and the Savannah River Channel Entrance Sea Buoy). When originally enacted, COTP Savannah did not allow any vessels over 1,600 gross tons within the boundaries of the RNA when an LNG tankship was transiting. As the Coast Guard, Southern LNG, the Savannah River Pilots, and the local tug operators gained experience in the safety and security aspects of LNG tankship arrivals, the RNA was revised multiple times to improve port mobility during LNG operations while not increasing associated safety and security risks.

When the new facility slip was placed into service, the RNA was again revised to account for the different possible mooring configurations and to remove several requirements based on the additional level of safety the slip provides. A Notice of Proposed Rulemaking was published for public comment and additional changes were made after considering this feedback. Although the Final Rule has not yet been published, COTP Savannah expects the RNA provisions to include a number of port-agreed upon requirements.

There are several requirements below for FiFi Class 1 equipped towing vessels. The National Fire Protection Academy outlines the criteria for towing vessels to be certified as Class 1 equipped in *NFPA 1915 – Standard on Marine Fire-Fighting Vessels*. This publication addresses the construction of marine fire-fighting vessels and contains criteria on a wide-range of specific standards that include outfitting, stability, propulsion, auxiliary machinery, electrical systems, fire pumps and fire-fighting equipment.

Requirements for vessel operations while an LNG tankship, carrying LNG in excess of heel, is underway within the RNA

- No vessel 1,600 gross tons or great may approach within two nautical miles of a transiting LNG tankship.
- All vessels less than 1,600 gross tons shall keep clear of transiting tankships.
- The vessel master must obtain permission from COTP Savannah before transiting into the RNA and can not enter or get underway within the RNA if visibility is not sufficient to safely navigate, and/or wind speed is, or is expected to be, greater than 25 knots.
- While transiting, the LNG tankship shall have a minimum of two escort towing vessels with a minimum of 100,000 pounds of bollard pull, 4,000 horsepower, and capable of

safely operating in indirect mode. At least one of the towing vessels shall be at least FiFi Class 1 equipped.

Requirements while LNG tankships are moored inside the facility slip

- An LNG tankship moored inside the facility slip shall have two standby towing vessels with a minimum of 100,000 pounds of bollard pull, 4,000 horsepower, and capable of safely operating in indirect mode. At least one of the towing vessels shall be at least FiFi Class 1 equipped.
- The standby towing vessels shall be available to provide a ready means of assistance to maintain a safe zone around the moored LNG tankship; to provide emergency firefighting assistance; to aid the LNG tankship in the event of an emergency departure; or to take other appropriate actions in an emergency as directed by the LNG vessel bridge watch.
- If two LNG tankships are moored inside the facility slip, each vessel shall provide a standby towing vessel that is FiFi Class 1 equipped with a minimum of 100,000 pounds of bollard pull, 4,000 horsepower, and capable of safely operating in indirect mode that is available to assist either vessel as described above.

Requirements while an LNG tankship is moored outside of the facility slip

- An LNG tankship moored outside of the LNG facility slip shall have on-scene a minimum of two escort towing vessels, with a minimum of 100,000 pounds of bollard pull, 4,000 horsepower and capable of safely operating in the indirect mode, to escort transiting vessels 1,600 gross tons or greater past the moored LNG tankship. At least one of these towing vessels shall be FiFi Class 1 equipped.
- In addition to the two towing vessels described above, the LNG tankship moored outside of the slip shall have at least one standby towing vessel with a minimum of 90,000 pounds of bollard pull to take appropriate actions in an emergency as directed by the LNG vessel bridge watch**.**
- If LNG tankships are moored both inside and outside of the slip, the LNG tankship moored outside the slip shall provide the two escort towing vessels and the LNG tankship moored inside the slip shall provide the standby towing vessel.

Requirements while LNG tankships are moored both inside and outside the LNG facility slip

- When one LNG tankship is moored inside and one LNG tankship is moored outside the LNG facility slip, the LNG tankship moored outside of the slip shall have on-scene a minimum of two escort towing vessels, with a minimum of 100,000 pounds of bollard pull, 4,000 horsepower and capable of safely operating in the indirect mode, to escort transiting vessels 1,600 gross tons or greater past the moored LNG tankship. At least one of these towing vessels shall be FiFi Class 1 equipped. In addition, the LNG tankship inside of the slip shall have at least one standby towing vessel with a minimum of

100,000 pounds of bollard pull, 4,000 horsepower, and FiFi Class 1 quipped to take appropriate action in an emergency.

- When one LNG tankship is moored outside and two LNG tankships are moored inside the LNG facility slip, the LNG tankship moored outside of the slip shall have on-scene a minimum of two escort towing vessels, with a minimum of 100,000 pounds of bollard pull, 4,000 horsepower and capable of safely operating in the indirect mode, to escort transiting vessels 1,600 gross tons or greater past the moored LNG tankship. At least one of these towing vessels shall be FiFi Class 1 equipped. In addition, the LNG tankships moored inside of the slip shall have at lease one standby towing vessel between the two ships with a minimum of 100,000 pounds of bollard pull, 4,000 horsepower, and FiFi Class 1 quipped to take appropriate action in an emergency.
- In the event of an actual emergency, escort towing vessels can be utilized as stand-by towing vessels to take appropriate action by the LNG vessel bridge watch.

Requirements for moored LNG tankships

- While moored within the RNA, LNG tankships shall maintain a bridge watch consisting of a docking pilot or licensed deck officer who shall monitor all vessels transiting passed the LNG facility. In addition, the LNG Bridge Watch shall communicate with the pilots of vessels 1,600 gross tons or greater at pre-designated locations prior to passing the LNG facility in order to take actions of the towing vessel(s) in the event of emergency.
- LNG tankships shall also have emergency towing wires (fire wires) positioned one meter above the waterline, both on the off-shore bow and quarter of the ship. LNG vessels equipped with waterline bollards are exempt from this requirement.

Requirements for other vessels while within the RNA

- When one or more LNG tankships are only moored inside the facility slip, towing vessel escorts for vessels greater than 1,600 gross tons are not required.
- When an LNG tankship is moored outside of the facility slip, vessels 1,600 gross tons or greater shall have a minimum of two towing vessels with a minimum capacity of 100,000 pounds of bollard pull, 4,000 horsepower, and the ability to operate safely in the indirect mode, made-up in such a way as to be immediately available to arrest and control the motion of an escorted vessel in the event of steering, propulsion or other casualty. At least one of the towing vessels shall be at least FiFi Class 1 equipped. These escort towing vessels are the same required by LNG tankships when moored outside of the facility slip or while LNG tankships are moored both inside and outside the LNG facility slip sections.
- Vessels 1,600 gross tons or greater shall make a broadcast on VHF Channel 13 at pre-designated locations on the Savannah River.
- Vessels 1,600 gross tons or greater shall at a minimum transit at bare steerageway when within an area 1,000 yards on either side of the LNG facility slip to minimize potential wake or surge damage to the LNG facility and vessel(s) within the slip.

- Vessels 1,600 gross tons or greater shall not meet or overtake within an area 1,000 yards on either side of the LNG facility slip when an LNG tankship is present in the slip.
- Vessels less than 1,600 gross tons shall not approach within 70 yards of an LNG tankship without COTP permission.
- No vessel shall enter the LNG facility slip at any time without COTP permission.

4.1.2 Savannah Area LNG Vessel Management and Emergency Plan

In addition to the requirements of the RNA, the entire process for LNG tankship arrivals is outlined in the Savannah Area LNG Vessel Management and Emergency Plan. This document contains detailed information on pre-arrival requirements for the facility, vessel, and COTP; vessel transit procedures; mooring procedures; cargo transfer operations and vessel departure procedures. This plan is periodically reviewed and updated to incorporate any new developments in the LNG vessel transit, transfer and departure procedures.

4.1.3 Coast Guard Presence and Intelligence

Because of the pre-arrival reporting requirements required by 33 CFR Part 160 and the Savannah Area LNG Vessel Management and Emergency Plan, Coast Guard security coordination takes place well in advance of LNG tankship arrivals. Upon receiving an Advance Notice of Arrival from an LNG tankship, COTP Savannah conducts a vessel safety and security screening using standardized matrices prior to port entry. The results of these screening are a key component in determining COTP Savannah's inspection and enforcement presence during the vessel's transit and their time in port. Additionally, COTP Savannah receives several national-level intelligence feeds that can include general threat assessments to certain maritime infrastructure or specific intelligence relating to a vessel or person of interest.

All Coast Guard security operations for LNG vessels and facilities, including harbor patrols of critical infrastructure, security zone enforcement, positive control boardings, vessel escorts, and aerial overflights, are conducted in accordance with Operation Neptune Shield, the Coast Guard's classified (SECRET) guidance on Port, Waterways, and Coastal Security.

4.1.4 Facility Security and Safety

As a facility regulated under the Maritime Transportation Security Act (MTSA), Southern LNG must meet all of the security requirements outlined in 33 CFR Parts 101 and 105. This includes defining the facility's security organizational structure, designating a Facility Security Officer, and implementing a Coast Guard-approved Facility Security Plan.

Southern LNG is subject to an annual MTSA compliance exam evaluating their entire security program including personnel training, recordkeeping and reporting, drills and exercises, external Facility Security Plan audits, equipment maintenance. Additionally, Coast Guard facility inspectors conduct random MTSA security spot checks of Southern LNG to verify proper implementation of the Facility Security Plan to include the performance of personnel with

security duties, vehicle screening rates, access control and monitoring, and the facility-to-vessel security relationship.

As a waterfront facility handling LNG, Southern LNG must also comply with the regulations of 33 CFR Part 127, including a number of specific requirements concerning equipment, operations, maintenance, training, and firefighting. As part of these requirements, Southern LNG must maintain a Coast Guard-approved Operations Manual and Emergency that contains LNG release response procedures, emergency shutdown procedures, fire equipment operating procedures, emergency lighting systems, emergency contact information, and the emergency procedures for mooring and unmooring a vessel.

Coast Guard facility inspectors also conduct an annual exam to ensure facility compliance with 33 CFR Part 127 and random cargo transfer monitors to verify the facility is operating in accordance with their Operations Manual.

4.1.5 Chatham County Warning Siren Program

The Chatham Emergency Management Agency uses warning sirens installed at recreation facilities and in areas of high population to notify the public of potential or actual emergencies such as hazardous material releases and fire. For public emergency notification, CEMA will activate the siren with a 3-minute fast high-low alarm. Upon hearing the alarm, residents are advised to seek shelter immediately and access other mediums such as local television and radio to gather additional information and guidance on the specific threat.

4.2 Additional Risk Management Recommendations Resulting from WSA

The WSA recommends four additional risk management strategies be implemented at all Maritime Security (MARSEC) Levels to reduce risk associated with LNG deliveries. The recommendations are outlined in the Sensitive Security Information supplement to this report.

5. RESOURCE NEEDS FOR SECURITY AND SAFETY

5.1 Coast Guard Resources

Based on the number of proposed and expanding LNG terminals, Coast Guard Headquarters developed a model to evaluate resource requirements for each operating and proposed LNG facility. The model calculation takes into account a number of factors including the number of estimated transits per week, the number of different LNG tankships expected to call on Savannah, the average vessel transit time, the average cargo transfer time, and the Coast Guard policy for safety and security activities related to LNG.

5.2 Port Resources

5.2.1 Tug Availability

Tug availability is the only potential limiting factor for port resources. The Port of Savannah currently has a complement of 10 tugs operated by either Moran or Crescent Towing including three tractor tug, 2 of which are FiFi Class 1 equipped. The most recent proposed change to the RNA further alleviates the requirement for towing vessel presence, namely for outbound LNG tankships departing the port in heel (less than 5% of the LNG tankship's carrying capacity). The WSA group did not feel additional tugs were necessary to maintain current tug availability levels, but felt future traffic growth might require additional tugs to support port operations without costly delays.

5.2.2 State Enforcement of Security Zones

An increase in LNG shipments would further drain Coast Guard response resources because state and local law enforcement agencies are not authorized to enforce federal law in Georgia. COTP Savannah is actively pursuing several possible avenues to legally obtain state and local assistance, including having the state overlay Special Exclusionary Zones over Coast Guard safety and security zones to allow for state enforcement, or passing a new Georgia statute making the violation of federal access areas also a violation of state law. Both of these possibilities may take considerable time to enact. In the interim, although local and state resources are assisting, only Coast Guard assets will be used for LNG vessel escorts and security zone enforcement.

5.2.3 Turning Basin Adjacent to Elba Island

During Southern LNG's recommisioning in 2001, COTP Savannah's positive letter of recommendation was contingent upon the establishment of a new turning basin adjacent to the berth to accommodate the safe turning of LNG vessels and increase safe water for passing vessels. Based on the size of Q-Max LNG tankships, COTP Savannah is considering reinstituting this turning basing requirement as part of the letter of recommendation for the Elba III expansion project.

6. CONCLUSION AND RECOMMENDATION

In accordance with NVIC 05-05, the Coast Guard Captain of the Port has three basic decision-making options in a WSR: the waterway is unsuitable for LNG marine traffic, the waterway is suitable for LNG marine traffic, or the waterway is suitable with additional measures to responsibly manage the safety and security risks.

After evaluating Southern LNG's proposal and reviewing their WSA, COTP Savannah has determined from a safety and security standpoint that the Savannah River is suitable for the

increase in LNG marine traffic associated with this project. Based on the Port of Savannah's experience with LNG import and the cooperative relationship between government agencies and port stakeholders, there is sufficient capability within the port community to responsibly manage the safety and security risks introduced by this expansion project. Coast Guard resource requirements for the predicted increase in LNG tankship arrivals are outlined in the Sensitive Security Information supplement to this report and are currently being addressed through the Coast Guard's budgetary process. Also, additional procedural changes identified in Section 4.2 of the Sensitive Security Information supplement will be evaluated and addressed by the Savannah Area Maritime Security Committee.

COTP Savannah will continue to collaborate with FERC in the development of the Environmental Impact Statement (EIS) for this project. After FERC issues the Final EIS and it meets Coast Guard NEPA requirements, COTP Savannah will issue a Letter of Recommendation to Southern LNG as required by 33 CFR Part 127.009, with copies to all government agencies having jurisdictional responsibilities.