

DOE/EA-1976

**FINAL**  
**ENVIRONMENTAL ASSESSMENT**

**FOR THE**

**EMERA CNG, LLC,  
COMPRESSED NATURAL GAS PROJECT,  
PORT OF PALM BEACH,  
CITY OF RIVIERA BEACH,  
PALM BEACH COUNTY, FLORIDA**



**U.S. Department of Energy**  
**National Energy Technology Laboratory**

**October 2015**

# COVER SHEET

**Responsible Agency:** U.S. Department of Energy (DOE)

**Title:** Final Environmental Assessment for the Emera CNG, LLC, Compressed Natural Gas Project, Port of Palm Beach, City of Riviera Beach, Palm Beach County, Florida (DOE/EA-1976D)

**Contact:** For additional copies or more information about this environmental assessment (EA), please contact:

Mr. Fred Pozzuto, NEPA Compliance Officer  
U.S. Department of Energy  
National Energy Technology Laboratory  
3610 Collins Ferry Road  
PO. Box 880 Morgantown, WV 26507-0880  
304-285-5219; 304-285-4403 (fax)  
Email : fred.pozzuto@netl.doe.gov

**Abstract:** On November 20, 2013, Emera CNG, LLC (Emera) filed an application (Application) with the Office of Fossil Energy (FE) of the Department of Energy (DOE) under Section 3 of the Natural Gas Act seeking long-term authorization to export compressed natural gas (CNG).

The National Environmental Policy Act (NEPA) requires DOE to consider the environmental impacts of its decisions on applications seeking authorization to export natural gas, including CNG. The construction and operation of the Emera facility is a connected action to Emera's application to export CNG. In this regard, DOE prepared this Environmental Assessment (EA) to meet its NEPA responsibilities.

Emera's CNG plant would include facilities to receive, dehydrate, and compress natural gas to fill pressure vessels with an open International Organization for Standardization (ISO) container frame mounted on trailers. Emera plans to truck the trailers a distance of one quarter mile from its proposed CNG facility to a berth at the Port of Palm Beach, City of Riviera Beach, Palm Beach County, Florida, where the trailers would be loaded onto a roll-on/roll-off (RO/RO) ocean going carriers (*i.e.*, waterborne vessels). Emera plans to receive natural gas at its planned compression facility from the Riviera Lateral, a pipeline owned and operated by Peninsula Pipeline Company. Although this would be the principal source of natural gas to Emera's CNG facility for export, during periods of maintenance at Emera's facility, or at the Port of Palm Beach, Emera may obtain CNG from other sources and/or export CNG from other general-use Florida port facilities. The proposed Emera facility would initially be capable of loading 8 million standard cubic feet per day (MMscfd) of CNG into tank containers and, after full build-out, would be capable to load up to 25 MMscfd. For the initial phase of the project, Emera intends to send these CNG tank containers from Florida to

Freeport, Grand Bahama Island, where the trailers would be unloaded from the ship, and the CNG decompressed and injected into a pipeline for transport to electric generation plants owned and operated by Grand Bahama Power Company (GBPC).

Emera's parent company, Emera Incorporated (Emera Inc.), owns approximately 80 percent of GBPC. GBPC's electric generation plants currently are powered by heavy fuel oil. Since the time that Emera Inc. acquired its interest in GBPC, GBPC has been working to improve its operations through capital investment in reliability upgrades and new generation. Specifically, GBPC plans to retrofit its plants to enable generation from natural gas. After modifications, GBPC's power plants will be considered "flex fuel" plants capable of utilizing both natural gas and petroleum as fuel sources. Emera expects this diversification of GBPC's fuel sources—namely, allowing the use of natural gas instead of heavy fuel oil for electric power generation—will reduce and stabilize customer electricity rates, thereby stimulating economic growth in the Bahamas. Additionally, Emera anticipates having a number of other potential customers for CNG from its proposed facility, all of whom are expected to be located within the Caribbean.

**Availability:** DOE encourages public participation in the NEPA process. A notice of availability was placed in the South Florida Sun-Sentinel on February 13, 2015, to announce the beginning of the 30-day public review and comment period. The draft EA was made available for public review beginning February 13, 2015. The draft EA was available on DOE's National Energy Technology Laboratory web site at <http://www.netl.doe.gov/library/environmental-assessments> and on DOE's NEPA web site at <http://energy.gov/nepa/nepa-documents>. The draft EA was also available at the Riviera Beach Public Library, 600 E Blue Heron Boulevard, Riviera Beach, Florida. The end of the public comment period was March 18, 2015. DOE accepted late comments to the extent practicable. This final EA is available on the DOE NEPA website listed above.

## ACRONYMS AND ABBREVIATIONS

°	degrees
%	percent
Bscf	billion standard cubic feet
CEQ	Council on Environmental Quality
CFR	Code of Federal Regulations
CH <sub>4</sub>	methane
CNG	compressed natural gas
CO	carbon monoxide
CO <sub>2</sub>	carbon dioxide
CSC	International Convention for Safe Containers
DOE	United States Department of Energy
EA	environmental assessment
EH&S	environmental, health, and safety
EIS	environmental impact statement
EPA	United States Environmental Protection Agency
FEMA	Federal Emergency Management Agency
FERC	Federal Energy Regulatory Commission
FDEP	Florida Department of Environmental Protection
FGT	Florida Gas Transmission Company
FONSI	Finding of No Significant Impact
FPL	Florida Power and Light
FTA	Free trade agreement
GBPC	Grand Bahama Power Company
HFC	hydrofluorocarbon
HP	horsepower
HVAC	heating, ventilation, and cooling
IMDG	International Maritime Dangerous Goods Code
IPCC	Intergovernmental Panel on Climate Change
ISO	International Organization for Standardization
LLC	Limited Liability Corporation
MARPOL	International Convention for the Prevention of Pollution from Ships
MEGC	multiple element gas container

## ACRONYMS AND ABBREVIATIONS (CONTINUED)

MMscfd	million standard cubic feet per day
N <sub>2</sub> O	nitrous oxide
NAAQS	National Ambient Air Quality Standards
NEPA	National Environmental Policy Act
NFPA	National Fire Protection Association
NGA	Natural Gas Act
NO <sub>2</sub>	nitrogen dioxide
NOAA	National Oceanic and Atmospheric Administration
NPDES	National Pollutant Discharge Elimination System
NWI	National Wetlands Inventory
O <sub>3</sub>	ozone
OSHA	Occupational Safety and Health Association
Pb	lead
PFC	perfluorocarbon
PM <sub>2.5</sub>	particulate matter with median aerodynamic diameter less than 2.5 micrometers
PM <sub>10</sub>	particulate matter with median aerodynamic diameter less than or equal to 10 micrometers
PPC	Peninsula Pipeline Company
psig	pounds per square inch gauge
RO/RO	roll-on/roll-off
scfd	standard cubic feet per day
SF <sub>6</sub>	sulfur hexafluoride
SFWMD	South Florida Water Management District
SHPO	State Historic Preservation Officer
SO <sub>2</sub>	sulfur dioxide
SPCC	Spill Prevention, Control, and Countermeasure
SWPPP	Stormwater Pollution Prevention Plan
U.S.	United States
USACE	United States Army Corps of Engineers
U.S.C.	United States Code
USFWS	United States Fish and Wildlife Service

# CONTENTS

<u>Section</u>		<u>Page</u>
1.0	INTRODUCTION	9
1.1	PURPOSE AND NEED FOR DOE ACTION.....	11
1.2	NATIONAL ENVIRONMENTAL POLICY ACT AND RELATED REGULATIONS .....	11
1.3	ENVIRONMENTAL RESOURCES NOT CARRIED FORWARD .....	12
1.4	CONSULTATIONS AND PUBLIC COMMENTS .....	15
1.4.1	Consultations .....	15
1.4.2	Comment-Response Process .....	16
2.0	DOE PROPOSED ACTION AND ALTERNATIVES	17
2.1	DOE’S PROPOSED ACTION .....	17
2.2	THE PROPOSED COMPRESSED NATURAL GAS FACILITY .....	17
2.2.1	Project Location and Site Plan.....	17
2.2.2	Facility Description.....	18
2.2.3	Construction.....	18
2.2.4	Proposed Project Operations.....	19
2.2.5	Startup, Shutdown, Maintenance, and Emergency Conditions.....	20
2.2.6	Decommissioning .....	21
2.2.7	Permits, Approvals and Applicant Committed Actions.....	22
2.3	NO-ACTION ALTERNATIVE .....	25
2.4	OTHER ALTERNATIVES CONSIDERED BUT ELIMINATED FROM FURTHER EVALUATION .....	25
3.0	AFFECTED ENVIRONMENT AND ENVIRONMENTAL CONSEQUENCES	26
3.1	WATER RESOURCES .....	26
3.1.1	Affected Environment.....	26
3.1.2	Environmental Consequences.....	29
3.2	AQUATIC RESOURCES .....	31
3.2.1	Affected Environment.....	31
3.2.2	Environmental Consequences.....	35
3.3	AIR QUALITY AND GREENHOUSE GASES .....	36
3.3.1	Affected Environment.....	37
3.3.2	Environmental Consequences.....	37
3.4	SOLID AND HAZARDOUS WASTE.....	39
3.4.1	Affected Environment.....	39
3.4.2	Environmental Consequences.....	39

3.5	SOCIOECONOMICS .....	41
3.5.1	Affected Environment.....	41
3.5.2	Environmental Consequences.....	42
3.6	PUBLIC AND OCCUPATIONAL HEALTH AND SAFETY .....	43
3.6.1	Affected Environment.....	43
3.6.2	Environmental Consequences.....	44
3.7	ENVIRONMENTAL JUSTICE .....	47
3.7.1	Affected Environment.....	47
3.7.2	Environmental Consequences.....	48
3.8	RESOURCE COMMITMENTS.....	49
3.8.1	Irreversible and Irrecoverable Commitments of Resources .....	49
3.8.2	Unavoidable Adverse Impacts .....	49
4.0	CUMULATIVE IMPACTS .....	50
4.1	CURRENT OR FUTURE PROJECTS FOR THE PORT OF PALM BEACH AREA .....	50
4.1.1	Florida Power and Light Overhead Line Relocation .....	52
4.1.2	Container Yard / Bulk Improvements.....	53
4.1.3	Slip 3 Redevelopment.....	53
4.1.4	Cargo Expansion – Cargo Lay-Down / Annex Property Development.....	54
4.1.5	On-Port Intermodal Rail Improvements .....	54
4.1.6	Off-Port Intermodal Rail Improvements.....	54
4.1.7	Intermodal Cruise Terminal Transfer Facility .....	55
4.1.8	Dredged Material Management Planning and Project Implementation.....	55
4.1.9	Cargo Storage on Florida Power and Light Right-of-Way .....	56
4.1.10	Harbor and Channel Improvements .....	56
4.1.11	Slip Number 2 Redevelopment and Enhancement .....	57
4.1.12	Waterside Cargo Terminal Redevelopment.....	58
4.1.13	Western Cargo Terminal Redevelopment.....	58
4.1.14	Slip Number 1 Redevelopment.....	58
4.1.15	North Wharf Improvements.....	59
4.1.16	Florida Power and Light Manatee Center.....	59
4.2	CUMULATIVE IMPACTS ASSOCIATED WITH THE PROPOSED ACTION .....	60
5.0	CONCLUSIONS .....	61
6.0	REFERENCES .....	62

## ***LIST OF FIGURES***

- 2.1 Port of Palm Beach Regional Location Map
- 2.2 Proposed CNG Facility to Vessel Delivery Route
- 2.3 Proposed CNG Lease Area Existing Conditions
- 2.4 Necessary Equipment
- 2.5 Preliminary CNG Facility Layout
- 2.6 Freeport Regional Location Map
- 2.7 Freeport Harbour Facility Project Location Map
- 2.8 Freeport Harbour Preliminary CNG Facility Layout
- 2.9 Freeport Harbour Proposed Pipeline Layout
- 2.10 Port of Palm Beach FEMA Flood Map

## ***LIST OF TABLES***

Table 1-1. Environmental Resource Areas with No, Negligible, or Temporary Impacts	13
Table 2-1. Summary of Environmental Permitting and Approval Requirements Port of Palm Beach, Florida Proposed CNG Facility	23
Table 2-1. Summary of Environmental Permitting and Approval Requirements Port of Palm Beach, Florida Proposed CNG Facility (continued)	24
Table 3-2. Employment Categories and Estimates (2008 to 2012)	42
Table 3-3. Racial and Ethnic Characteristics (2010 Census)	47
Table 4-1. Current or Future Projects in the Port of Palm Beach Area	51

## ***LIST OF APPENDICIES***

- Appendix A Distribution List
- Appendix B Correspondence and Agency Consultation
- Appendix C Scientific Names Referenced
- Appendix D Public Comments Received
- Appendix E Federal Energy Regulatory Commission (FERC) Order
- Appendix F Public Comments
- Appendix G Phase 1 Environmental Site Assessment Executive Summary



## SUMMARY

The U.S. Department of Energy (DOE) prepared this environmental assessment (EA) to evaluate the potential environmental impacts that would occur as a result of the construction and operation of a compressed natural gas (CNG) facility by Emera CNG, LLC (Emera). Emera's proposed action includes a proposed facility at the Port of Palm Beach, in the City of Riviera Beach, in Palm Beach County, Florida, to be constructed for the purpose of compressing and exporting natural gas as CNG in an amount up to 8 million standard cubic feet per day (MMscfd), equivalent to 2.92 billion standard cubic feet per year (Bscf/yr), in the initial phase evaluated in this EA. Emera has stated the project may be expanded with the capability of exporting CNG in an amount up to 25 MMscfd (9.125 Bcf/yr) at a later time. The expanded scope would require a separate environmental review, as appropriate. CNG exports would occur via trailers, tank containers, and ocean-going carriers to a facility at Freeport Harbour, Grand Bahama Island (the initial phase). Emera's proposed facility may also be used in the future to export CNG to other countries not prohibited by United States law or policy. This EA also evaluates the No-Action Alternative, under which Emera would not be authorized to export CNG from the Port of Palm Beach and the proposed project would not be constructed.

On November 20, 2013, in FE Docket No. 13-157-CNG, Emera filed an application with DOE's Office of Fossil Energy (DOE/FE) under Section 3 of the Natural Gas Act, 15 U.S.C. § 717b (NGA), for long-term authorization to export CNG from its proposed facility in a volume equivalent to 9.125 billion standard cubic feet per year (Bscf/yr) of natural gas (25 MMscfd to both: i) countries with which the United States currently has, or in the future will have, a free trade agreement (FTA) requiring national treatment for trade in natural gas, (FTA countries),<sup>1</sup> and ii) countries with which the United States does not have a free trade agreement requiring national treatment for trade in natural gas and with which trade is not prohibited by U.S. law or policy (non-FTA countries).

DOE must meet its obligation under Section 3 of the NGA to authorize the export of natural gas, including CNG, unless it finds that the export is not consistent with the public interest. Under Section 3(c) of the NGA, applications to export natural gas, including CNG, to FTA countries are deemed to be consistent with the public interest, and DOE must grant the application without modification or delay, per 15 U.S.C. § 717b(c). Accordingly, on June 13, 2014, DOE/FE granted the FTA portion of the Application in DOE/FE Order No. 3447, authorizing the export of the requested volume of CNG (equivalent to 9.125 Bcf per year of natural gas) to FTA countries.

Section 3(a) of the NGA requires DOE to grant applications to export natural gas, including

---

<sup>1</sup> The United States currently has FTAs requiring national treatment for trade in natural gas with Australia, Bahrain, Canada, Chile, Colombia, Dominican Republic, El Salvador, Guatemala, Honduras, Jordan, Mexico, Morocco, Nicaragua, Oman, Panama, Peru, Republic of Korea, and Singapore. FTAs with Israel and Costa Rica do not require national treatment for trade in natural gas.

CNG, to non-FTA countries unless DOE finds that the proposed export will not be consistent with the public interest, per 15 U.S.C. § 717b(a). DOE's decision to grant or deny a requested non-FTA export authorization is based on a public interest review of the proposed exports. As part of this review, on July 3, 2014, DOE/FE issued a notice in the *Federal Register* (79 Fed. Reg. 38,017) of Emera's Application and seeking public comment on the portion of Emera's Application requesting authorization to export CNG to non-FTA countries. Because the proposed volumes of CNG would be exported from the same facility, the FTA export volume approved in DOE/FE Order No. 3447 would not be additive to Emera's requested non-FTA export volume.

DOE's proposed action is to grant authorization for the initial phase of the proposed export of CNG in an amount equivalent to 8 MMscfd, or 2.92 Bscf/yr of natural gas to non-FTA countries under Section 3(a) of the NGA, and Part 590 of DOE regulations, 10 Code of Federal Regulations (CFR) Part 590. DOE's authorization would allow Emera to export the proposed volume of CNG in the initial phase from its proposed facility at the Port of Palm Beach to non-FTA countries.

The draft EA was made available to the public on the DOE National Energy Technology Laboratory website and DOE's NEPA website on 13 February 2015, commencing the official 30-day public comment period. The draft EA was also available at the Riviera Beach Public Library. The public had the opportunity to submit comments or questions via email, or mail through 18 March 2015. Under the federal Coastal Zone Management Act (15 C.F.R. § 930.41), the Florida State Clearinghouse had 60 days from receipt of the document (14 April 2015) to comment on proposed federal actions. Every attempt was made to adequately respond to these comments and incorporate them into the final EA as appropriate. Late comments were accepted to the extent practicable.

A total of 58 comments were received from 7 agencies during the comment period including the U.S. Fish & Wildlife Service, Florida Department of Environmental Protection, Florida Fish and Wildlife Conservation Commission, Florida Department of Transportation, Florida State Historic Preservation Officer, City of Riviera Beach, and the Town of Palm Beach. No comments were received from the U.S. Army Corps of Engineers (USACE), U.S. Coast Guard, NOAA National Marine Service, Federal Emergency Management Agency (FEMA), U.S. Environmental Protection Agency (EPA), Region 4, Seminole Tribe of Florida, or Seminole Nation of Oklahoma. No comments were received from individual citizens.

This final EA has been prepared to evaluate DOE's action in accordance with the National Environmental Policy Act of 1969 (NEPA), 42 U.S.C. §§ 4321 *et seq.*; NEPA's implementing regulations promulgated by the Council on Environmental Quality (CEQ) (40 CFR Parts 1500 to 1508); and DOE's NEPA implementing procedures (10 CFR Part 1021). The Emera Project was included in the scope of DOE's NEPA review as a connected action. DOE would not be

providing funding or financial assistance to this project. DOE is evaluating the environmental impacts of Emera's Application. Thereafter, if no significant impacts are identified, DOE/FE will prepare and issue the Finding of No Significant Impact (FONSI).

This final EA evaluates 16 resource areas for potential impacts associated with the proposed project. After preliminary evaluation, DOE determined that there would be either no or negligible impacts for nine resource areas: aesthetics and visual resources; land use; community services; cultural resources; geology, topography, and soils; terrestrial resources; noise and vibration; transportation; and Utilities. Therefore, these nine resource areas were not evaluated in detail in the EA and were not given further consideration.

The EA discusses the results of the analysis of seven resource areas: water resources, aquatic resources, air quality, solid and hazardous waste, socioeconomics, public and occupational health and safety, and environmental justice. For these resource areas, DOE determined that there would be no impacts or that potential impacts would be minor, temporary, or both. The following paragraphs summarize the analyses.

### ***Water Resources***

Site preparation and construction activities could result in stormwater runoff and soil erosion at the proposed project site. The Port of Palm Beach maintains master permits from the South Florida Water Management District (SFWMD) and the USACE, which ensure protection of the water resources in and adjacent to the Port and minimize the potential for adverse impacts to water resources to occur as a result of this facility. The Port of Palm Beach has acquired the proper Section 10 and Section 404 permits for the docking. The Port of Palm Beach holds a National Pollutant Discharge Elimination System (NPDES) Multi-Sector Generic Permit for Stormwater Discharge Associated with Industrial Activity (MSGP). The Emera project would be required to sign off on and comply with the stipulations of this permit. The Port of Palm Beach also has established a stormwater pollution prevention plan (SWPPP) with which Emera would be required to comply during project operations. Emera would create and comply with a separate SWPPP for construction. Emera would consult with the Port of Palm Beach and the Florida Department of Environmental Protection (FDEP) to ensure both the project and the Port are in full compliance with local, state, and federal requirements. Additionally, Emera would spray disturbed soils with water to suppress fugitive dust as necessary. The water for spraying would be hauled by truck from municipal water sources. Therefore, potential impacts associated with stormwater runoff and soil erosion as a result of construction of the proposed project are anticipated to be minor and temporary.

No wetlands are present on the proposed project site. Accordingly, no impacts to wetlands are anticipated as a result of construction activities. Likewise, because the proposed project site is located outside of the 100-year floodplain, no impacts to floodplains would be anticipated as a result of the construction of the proposed project.

The project would not use groundwater or surface water from the site or surrounding area for construction or operations. During transport, the use of seawater for ballast or cooling would not have an impact on water quality. The water used for cooling would have a higher temperature upon discharge as compared to intake. During transport, ocean-going carrier(s) would comply with the appropriate International Convention for the Prevention of Pollution from Ships (MARPOL) regulations to minimize potential impacts from ocean-going carrier waste during trips to and from the island of Grand Bahama and other potential destinations. No impacts to surface water would be anticipated as a result of water use for ballast and cooling.

The construction company would be required to develop and implement a Spill Prevention, Control, and Countermeasure (SPCC) plan to prevent, contain, manage, and clean up hazardous materials releases. Potential waste streams generated by station operation may include contaminated water from the dryer. Contaminated water from the gas dryer (estimated to be 730 gallons per year with natural gas liquids varying with the gas quality during the initial phase, and with similar volumes anticipated for each subsequent phase) would be collected for off-site disposal. The SPCC would include procedures to deal with accidental releases of contaminated dryer water. No known contamination is present in the groundwater or soils at the project site. Therefore, potential impacts associated with hazardous materials spills as a result of operations of the proposed project are anticipated to be negligible.

### *Aquatic Resources*

No construction would occur in the water. With implementation of the best management practices and plans described above, no hazardous material or soil erosion would be anticipated to runoff into the water. Therefore, potential impacts to aquatic resources, including threatened and endangered aquatic resources as a result of construction of the proposed project are not anticipated.

The project would not use ocean water from the site or surrounding area for operations. Potential waste streams generated by station operation may include contaminated water from the dryer; this water will be collected for off-site disposal at an approved facility. The ocean-going vessels utilized by the CNG facility would comply with all port procedures to minimize potential impacts to aquatic resources as a result of project operations. The use of seawater for ballast or cooling would not have an impact on aquatic resources. The water used for cooling would have a higher temperature upon discharge as compared to intake which could attract manatees. During transport, ocean-going carrier(s) would comply with the appropriate MARPOL regulations to minimize potential impacts from ocean-going carrier waste during trips to and from the island of Grand Bahama and other potential destinations. Therefore, impacts to aquatic resources, including threatened and endangered seagrasses, manatees, and turtles would be anticipated to be minor as a result of project operations.

## *Air Quality*

Construction of the Emera CNG facility would cause a slight increase in emissions of all criteria pollutants as a result of the burning of gasoline in vehicles and construction equipment and the mobilization of fugitive dust as a result of construction activities. Pollutants emitted and mobilized by the construction activities would be insignificant in total volume. Emissions from vehicles would be minimized through regular vehicle maintenance. The primary concern for air quality impacts would be fugitive dust mobilized by construction activities. Such dust has the ability to affect public health and visibility. As described above, Emera would spray disturbed soils with water to suppress fugitive dust as necessary. Overall, impacts to air quality as a result of construction of the proposed project would be short-term, minor, and controlled through best management practices.

Emissions associated with operations of the proposed CNG facility operations would include combustion emissions from vehicles, operational venting of hoses and possible emissions associated with natural gas emergency venting or leakage. Proper maintenance of onsite vehicles and equipment would help minimize emissions impacts. Operational natural gas venting of hoses is estimated to be 800-1200 scfd (equivalent to 0.010% to 0.015% of CNG output). Because Emera would be required to comply with all federal, FDEP, and Palm Beach County regulatory and permitting requirements for air emissions, impacts associated with these emissions would be anticipated to be minor. Possible emissions associated with natural gas emergency venting or leakage from the tanks or compression station would be minor and controlled through standard operating procedures and emergency plans. The compressors are powered by electricity; therefore no emissions from powering the compressors would be anticipated at the proposed CNG facility. As such, there would be negligible emission increases at the initial 8 MMscfd output. Emera would coordinate with the FDEP and Palm Beach County Health Department to ensure the facility is in compliance with state air quality regulations.

Overall, air emissions associated with facility operations would be anticipated to be minor. The Emera project would require and obtain construction and operations air permits.

## *Solid and Hazardous Waste*

During construction of the initial phase of the project, the proposed project would generate an estimated 15,000 to 20,000 tons of construction waste over the approximately four to six month construction period. This waste would consist primarily of concrete, pavement, soil, rock, gravel, iron, and steel. Emera would dispose of the waste in a local or regional landfill with sufficient capacity, or recycle it if deemed appropriate. During operations, the proposed project would generate a minimal routine amount of recyclables and non-hazardous solid waste. Operational waste would include paper waste from office operations, empty containers (i.e. drums, totes, and boxes), lube oil, small parts replacement for equipment, and infrequent desiccant replacement for the dryer. Emera would recycle these materials if feasible. As

described above, potential waste streams generated during construction and operations of the proposed facility may include contaminated water from the dryer, spills of fluids associated with machine and vehicle operations and maintenance (oils, gas, battery fluid, lubricants, etc.), stormwater, wastewater, solid waste, and air emissions associated with machine and vehicle operations. Spills of fluids associated with machine and vehicle operations and maintenance (oils, gas, battery fluid, lubricants, etc.) would generally be treated at the moment of occurrence in accordance with the site's SPCC plan, Environmental, Health, and Safety (EH&S) plan, and Occupational Safety and Health Act regulations. Contaminated water (estimated to be 730 gallons per year with natural gas liquids varying with the gas quality during the initial phase, with similar volumes anticipated for each subsequent phase) from the gas dryer would be collected for off-site disposal.

The facility would develop and follow a SWPPP during construction for the entire leased area and would be required to comply with the Port's SWPPP and NPDES permit during operations to minimize any potential impacts to local stormwater systems. The facility would obtain all appropriate permits through FDEP for construction of the facility. Stormwater would be channeled to existing stormwater collection systems on and offsite and discharged to the Lake Worth Lagoon.

Domestic wastewater, if generated, would be conveyed to the site's sewer system. Solid waste would be collected by a contracted firm and transported to an offsite landfill. Machines and vehicles at the site would be regularly inspected to minimize the potential for spills of fluids (oil, gas, battery fluid, lubricants, etc.). Such spills would generally be treated at the moment of occurrence in accordance with the site's health and safety plan and Occupational Safety and Health Administration (OSHA) regulations. No known contamination is present in the groundwater or soils at the project site. During transport, ocean-going carrier(s) would comply with the appropriate MARPOL regulations to minimize potential impacts from ocean-going carrier waste during trips to and from the island of Grand Bahama and other potential destinations. Therefore, potential impacts associated with hazardous materials spills as a result of construction of the proposed project are anticipated to be negligible.

### ***Socioeconomics***

The proposed project would create jobs during the construction and operations of the Emera CNG facility. It is likely the construction jobs would be filled by local or regional construction companies and that no additional permanent construction jobs would be created. The operations stage would result in a small increase in new jobs, likely to be filled from the local population. There would be no changes to population, infrastructure, or the level of social services available in the area as a result of the proposed action. Some businesses, vendors, and equipment suppliers may experience minor benefits from lease or capital orders to support the construction and from patronage by construction crews to local businesses.

It is estimated that up to ten construction workers per day would be required at the Port of Palm Beach over a period of four to six months to construct the facility. During the initial operations, two full-time staff would maintain the CNG facility, five staff would be employed for facility and loading operations, and approximately ten crew members would operate and maintain the ocean-going carrier. The facility would be anticipated to have a minimum 20 year operational timeframe. Minor increases in operations staff could occur should facility operations expand at any point during the operational period. Overall, construction related impacts related to socioeconomics would be minor and potentially beneficial.

### ***Public and Occupational Health and Safety***

It is likely that potential worker accidents during construction would remain within the national averages for construction activities. Prior to construction, Emera and its contractors would develop and implement site-specific occupational health and safety plans. Emera would construct the facility in accordance with all applicable company, port, local, state and federal, and company standards and requirements.

Safety and health factors related to operations of the proposed CNG facility at the Port of Palm Beach would include medical emergencies to operations staff from work-related accidents, the potential for chemical releases (such as lubricants, oil, gas, water from dryer, battery fluids, and natural gas) to affect the facility or port workers or the surrounding public, fires or explosions, severe weather, technological incidents, or terrorist activities. The greatest potential safety hazard is a fire or explosion related to a leak or rupture at the facility or within the compressed tanks during shipping. Emera would utilize multiple measures to minimize and mitigate these risks. Prior to commencing operations, Emera and its contractors would develop and implement site-specific EH&S plans and conduct extensive safety training. Emera would operate the facility in accordance with all applicable port, local, state and federal, and company policies and regulations. Employees would be trained and kept informed of emergency plans and of the presence and handling of any hazardous materials. Safety features would be installed around the facility and the facility would be designed in accordance with federal and state regulations. Emera would maintain appropriate fire protection systems and would coordinate with port and local agencies for emergency management communications, planning, and response. Tank containers, equipment and piping would be designed, maintained, inspected, tested and certified in accordance with all codes and regulations. The construction and operation of the Emera facility would represent a minimum increase in risk to the nearby businesses and communities. With implementation of these best management practices and standard operating procedures, the presence of hazardous materials on the project site would have minor impacts associated with implementation of the proposed action.

### ***Environmental Justice***

Minority and low-income populations live within the area potentially impacted by the proposed project. No direct adverse impacts are anticipated to the minority or low-income populations from the proposed project. Minor indirect beneficial impacts may occur if construction and operations workers patronize local businesses. Minor beneficial socioeconomic impacts may occur for certain individuals if they are hired for the new jobs associated with operations of the proposed facility. Overall, potential impacts related to environmental justice would be minor and potentially beneficial.

### ***Cumulative Impacts***

The project would not cause impacts cumulatively with other reasonably foreseeable projects.

### ***No-Action Alternative***

Emera would not be authorized to export CNG from the Port of Palm Beach and would not construct the proposed facility under the No-Action Alternative. Therefore, there would be no impacts to any resource under the No-Action Alternative.



## 1.0 INTRODUCTION

This final environmental assessment (EA) evaluates potential environmental impacts that would occur as a result of the construction and operation of a compressed natural gas (CNG) facility by Emera CNG, LLC (Emera). Emera's proposed action includes a proposed facility at the Port of Palm Beach, in the City of Riviera Beach, in Palm Beach County, Florida, to be constructed for the purpose of compressing and exporting natural gas as CNG in an amount up to 8 MMscfd (2.92 Bscf/yr) in the initial phase evaluated in this EA, with the capability of expanding to 25 MMscfd [9.125 Bscf/yr] at a later time. CNG exports would occur via trailers, tank containers, and ocean-going carriers to a facility at Freeport Harbour, Grand Bahama Island (the initial phase).

On November 20, 2013, Emera filed an Application with the Department of Energy's Office of Fossil Energy (DOE/FE) in FE Docket No. 13-157-CNG under Section 3 of the Natural Gas Act (NGA) for long-term, multi-contract authorization to export CNG produced from domestic sources in a volume equivalent to approximately 9.125 Bscf/yr, (25 MMscfd) of natural gas as CNG. Emera requested authorization to export the CNG by vessel from a proposed CNG compression and loading facility to be located at the Port of Palm Beach, in the City of Riviera Beach, in Palm Beach County, Florida. Emera seeks to export the CNG solely on its own behalf for a 20-year term, commencing on the earlier of the date of first export or five years from the date the authorization is issued.

As noted above, Emera's Application seeks to export CNG from the proposed facility to both FTA countries and non-FTA countries with which trade is not prohibited by U.S. law or policy. DOE must meet its obligation under Section 3 of the NGA to authorize the export of natural gas, including CNG, unless it finds that the export is not consistent with the public interest. By law, under Section 3(c) of the NGA, applications to export natural gas, including CNG, to FTA countries are deemed to be consistent with the public interest and DOE must grant the application without modification or delay, per 15 U.S.C. § 717b(c). Under Section 3(a) of the NGA, applications to export natural gas, including CNG, to non-FTA countries require DOE to conduct a public interest review of the requested authorization and to grant the application unless DOE finds that the proposed export will not be consistent with the public interest, per 15 U.S.C. § 717b(a).

On March 20, 2014, Emera filed a petition with the Federal Energy Regulatory Commission (FERC) in FERC Docket No. CP-14-114-000, requesting that FERC declare that Emera's construction and operation of facilities to produce CNG that will be transported by trucks to ships for export to the Bahamas will not be subject to the Commission's jurisdiction under the NGA. Subsequently, on September 19, 2014, FERC granted the petition in an Order for Petition for Declaratory Order (148 FERC ¶ 61,219). Specifically, FERC granted Emera's petition for a declaratory finding that Emera's proposed facilities and operations will not be subject to the Commission's jurisdiction under the NGA. FERC's declaratory order is included in this EA as

## Appendix E.

Additionally, on June 13, 2014, DOE/FE issued DOE/FE Order No. 3447, in which it granted the portion of the Application requesting authority to export CNG to FTA countries. Under that order, Emera is authorized to export domestically produced CNG by vessel from its proposed facility at the Port of Palm Beach to FTA countries. The volume of CNG authorized in Order No. 3447 is equivalent to approximately 9.125 Bscf/yr of natural gas for a 20-year term, beginning on the earlier of the date of first export or five years from the date the authorization is issued (*i.e.*, June 13, 2019). Emera is authorized to export this CNG on its own behalf, pursuant to one or more long-term contracts (a contract greater than two years).

On July 3, 2014, DOE issued a notice of application in the *Federal Register* (79 Fed. Reg. 38,017) providing notice and seeking public comment on the portion of Emera's Application seeking authorization to export CNG to non-FTA countries.

This EA is prepared in accordance with the National Environmental Policy Act (NEPA), U.S.C. §§ 4321 *et seq.*, NEPA's implementing regulations promulgated by the Council on Environmental Quality (CEQ) (40 CFR Parts 1500 to 1508), and DOE's NEPA implementing procedures (10 CFR Part 1021). As noted above, the Emera project was included in the scope of DOE's NEPA review as a connected action. DOE would not be providing funding or financial assistance to this project. DOE is the lead agency in the environmental review of Emera's Application required by NEPA.

The purpose of this EA is to determine whether Emera's proposed project would cause significant adverse impacts to the environment. If potentially significant adverse impacts are identified and, if they cannot be mitigated or avoided, then a more detailed environmental impact statement (EIS) would be required. If no significant impacts are identified, a Finding of No Significant Impact (FONSI) would be prepared and made available to the public before implementation of the proposed action.

The draft EA was made available to the public on the DOE National Energy Technology Laboratory website and DOE's NEPA website on 13 February 2015, commencing the official 30-day public comment period. Every attempt was made to adequately respond to all comments received and incorporate them into this final EA as appropriate.

To comply with NEPA, DOE prepared this final EA for the construction and operation of the CNG facility at the Port of Palm Beach, Florida. This final EA also examines the No-Action Alternative, under which Emera would not be granted the authorization to export CNG from the Port of Palm Beach and consequently, would not construct the proposed facility. *Chapter 1* introduces the project and the purpose and need for DOE action; describes the NEPA and related regulations; discusses the resources not analyzed in detail, and the consultation and public comment process. *Chapter 2* discusses DOE's proposed action, Emera's proposed project, and the No-Action Alternative. *Chapter 3* details the affected environment and potential

environmental consequences of the proposed project and of the No-Action Alternative, and considers resource commitments. *Chapter 4* addresses cumulative impacts, and *Chapter 5* provides the conclusions from the analyses. *Chapter 6* lists the references cited for this document. **Appendix A** contains the distribution list. **Appendix B** contains consultation correspondence between DOE and other agencies and tribal governments. Appendix F contains comments and responses.

## **1.1 PURPOSE AND NEED FOR DOE ACTION**

According to Emera, the high cost of electricity in the Bahamas, a non-FTA country, presents a major barrier to economic growth and has resulted in decreased customer satisfaction in the region. All electricity generation plants in Grand Bahama currently use heavy fuel oil, the price of which is tied to the price of crude oil. As noted above, Emera's parent company, Emera Inc., is the majority owner of Grand Bahama Power Company (GBPC). Emera Inc. (and, in turn, Emera) is committed to stabilizing and, where possible, reducing the cost of electricity for its customers and to lowering emissions related to electricity production. Emera proposes to export lower cost and cleaner burning natural gas from the United States to Grand Bahama for these purposes. Emera's proposed CNG facility is strategically located due to the proximity of the Port of Palm Beach in relation to Grand Bahama, to nearby abundant natural gas resources, and to the Riviera Lateral transmission line.

As stated in **Section 1.0** of this EA, DOE will not make a final decision on Emera's Application to export CNG to non-FTA countries until DOE has met all of its statutory responsibilities. Specifically, DOE must conduct a public interest review of Emera's requested exports, then approve or deny the non-FTA portion of Emera's Application based on that review. As part of the public interest review, DOE must consider the potential environmental impact of the construction and operation of the facilities necessary to achieve the compression, transportation, and export of CNG from Emera's proposed facility at the Port of Palm Beach to non-FTA countries, including the Bahamas.

## **1.2 NATIONAL ENVIRONMENTAL POLICY ACT AND RELATED REGULATIONS**

Section 3 of the NGA (15 U.S.C. §717b), as amended by the Energy Policy Act of 2005, requires approval of DOE for the import and export of natural gas. As stipulated in the NGA, applicants are required to comply with NEPA prior to receiving authorization to commence exports of natural gas, including CNG. In accordance with the DOE NEPA implementing procedures, DOE must evaluate the potential environmental effects of a proposed action that could have a significant impact on human health and the environment as part of their planning and decision-making process. This EA fulfills DOE's obligations under NEPA and provides DOE with the information needed to make an informed decision about the proposed action.

This final EA evaluated the potential individual and cumulative impacts of the proposed project. No other action alternatives were analyzed. For purposes of comparison, this final EA also

evaluated the impacts that could occur if DOE did not authorize the export of CNG from the Port of Palm Beach and the facility was not constructed (the No-Action Alternative). This assumption allowed DOE to compare the impacts of an alternative in which the project occurred with one in which it does not.

### **1.3 ENVIRONMENTAL RESOURCES NOT CARRIED FORWARD**

**Chapter 3** of this EA describes the affected environment and examines the potential environmental impacts of the proposed project, associated actions, and the No-Action Alternative for the following resource areas:

- Water Resources
- Aquatic Resources
- Air Quality
- Solid and Hazardous Waste
- Socioeconomics
- Public and Occupational Health and Safety
- Environmental Justice

The focus of the detailed analysis in **Chapter 3** is on those resources that have the potential for significant impacts or controversy, or typically interest the public. DOE determined that there would be no impacts or the potential impacts would be negligible and/or temporary in nature for the resources listed in **Table 1-1**. Therefore, DOE determined that further analysis is unnecessary for these resources. In terms of the No-Action Alternative, the potential impacts listed in **Table 1-1** would not occur because the proposed project would not proceed.

**Table 1-1. Environmental Resource Areas with No, Negligible, or Temporary Impacts**

<b>Technical Area</b>	<b>Rationale</b>
<b>Aesthetics and Visual Resources</b>	<p>The proposed project is located within the existing industrialized Port of Palm Beach complex and would not significantly alter the local viewshed around the Port or of the City of Riviera Beach. Therefore, the proposed project would not adversely affect aesthetics or visual resources, and the proposed project site is not located near sensitive visual resource receptors such as recreational viewers. The facility would not block significant or scenic views and is not located on or near designated scenic highways. The compressors and other operation equipment would have relatively low profiles, would not be seen at a distance, and are not visually intrusive elements with respect to other industrial facilities at the port.</p> <p>Port use in Palm Beach predates much of the surrounding residential development along Lake Worth shorelines and the Port educates adjacent communities on the importance of the commerce and the role of the port in the community in an effort to better integrate itself with adjacent areas as it continues to maintain and expand operations. The Port’s neighbor east of U.S. 1 and south of the Port is the Florida Power and Light (FPL) Riviera Beach Power Plant. The plant is located just to the north of the West Palm Beach/Riviera Beach municipal limits and is thus in Riviera Beach.</p> <p>The proposed project is consistent with the visual characteristics of the existing infrastructure at the port. There are no aesthetically sensitive areas within the viewshed of the port; therefore, no impacts to visual and aesthetic resources are anticipated, and this resource was not analyzed further.</p>
<b>Land Use</b>	<p>The proposed CNG facility at the Port of Palm Beach is proposed to occur in areas zoned industrial (IG) by the City of Riviera Beach. Within these IG zones, compressing natural gas is a permitted use as it constitutes the processing of a commodity that is not prohibited or requires a special exception in accordance with section 31-382(a)(2) of the City of Riviera Beach, Florida Code of Ordinances. The project would not conflict with neighboring land uses, land use plans or policies of the City of Riviera Beach or Palm Beach County, habitat conservation plans, or natural community conservation plans. The facility will be constructed in a portion of the Port that is already paved and would not require the conversion of native habitat.</p>
<b>Geology, Topography, and Soils</b>	<p>The proposed CNG facility is proposed to be constructed in portions of the Port of Palm Beach that was previously used for industrial activity and would not require the conversion of native soils, geological formations, or topography. Geological hazards are not common in the City of Riviera Beach or Palm Beach County. During construction, best management practices such as use of the Stormwater Pollution Prevention Plan (SWPPP) administered by the Port of Palm Beach would be utilized to minimize soil erosion. Exfiltration trenches would be designed for the facility and tied into the port’s existing stormwater management system. No significant changes in topography would occur as a result of implementation of the proposed action. Since negligible impacts to geology, topography, and soils are anticipated, this resource was not analyzed further.</p>
<b>Terrestrial Resources</b>	<p>The proposed CNG facility is proposed to be constructed in a portion of the Port of Palm Beach that was previously used for industrial activity and would not require the conversion of existing terrestrial habitat or impact terrestrial species. The site is currently paved and no natural areas are present. Therefore, impacts to terrestrial species would not be anticipated. No threatened or endangered species are known or suspected to occur on the site. The potential to encounter listed terrestrial species is minimal; therefore negligible impacts would be anticipated. Since negligible impacts to terrestrial resources are anticipated, this resource was not analyzed further.</p>

<b>Technical Area</b>	<b>Rationale</b>
<b>Community Services</b>	<p>No effects to community services of the City of Riviera Beach or Palm Beach County are expected to occur due to the construction of the proposed action at the Port of Palm Beach. There would be a temporary increase of construction workers during the construction period; however, this increase is temporary and negligible and would not affect community services such as law enforcement, fire protection, medical care, schools, family support services, shopping, or recreation facilities.</p> <p>Operation of the CNG facility at the Port of Palm Beach would require approximately seven facility operations staff and ten vessel crew. These operational needs would cause a negligible increase in demand for community services. The public service infrastructure could adequately handle the negligible increase in population due to the project. The local emergency services, healthcare services, and school systems are not expected to be impacted since the demand would not exceed available capacity of existing services. Since negligible impacts are anticipated, this resource was not analyzed further.</p>
<b>Cultural Resources</b>	<p>The proposed CNG facility at the Port of Palm Beach is sited in a paved area that does not require the conversion of native soils. Additionally, the area surrounding the site has been a functional port for many years. Therefore, no impacts to cultural resources are anticipated and this resource was not evaluated further. In a letter dated February 25, 2015, the Florida State Historic Preservation Officer (SHPO) concurred that there would be no impacts to historic resources as a result of the proposed action.</p>
<b>Noise and Vibration</b>	<p>There would be a temporary increase of noise and vibration in the immediate project vicinity at the Port of Palm Beach as a result of activities during the construction period; however, this increase is temporary and negligible and would not be detected outside of the port facilities. Construction workers would utilize hearing protection as a standard best management practice when in the vicinity of elevated noise levels caused by construction activities.</p> <p>The compressors and other operation equipment would have relatively low noise and vibration emissions which would not be detected beyond the port facilities. Noise levels would be anticipated to be approximately 80 dBA at a distance of 10 feet and below 65 dBA at a distance of 100 feet. The City of Riviera Beach ordinances for sound levels for fixed mechanical equipment in industrial properties are 65 dBA at the property boundary. The CNG facility is located more than 300 feet from the Port of Palm Beach boundary, therefore noise levels for the CNG facility would be below both the industrial and residential City ordinances. Operations workers would operate under standard best management practices and would utilize hearing protection as needed when operating in the vicinity of elevated noise levels. In addition, noise and vibration generated as a result of the operation of the proposed facility would be similar to other activities at the ports. Because impacts would be negligible to the overall cumulative noise and vibration impacts, this resource was not analyzed further.</p>

<b>Technical Area</b>	<b>Rationale</b>
<b>Transportation</b>	<p>The proposed CNG facility at the Port of Palm Beach is proposed to be constructed and to operate within existing, active port area. As reported in the Port of Palm Beach Master plan Update (2013), the Port is the fourth busiest container port in the State of Florida and the twenty-first busiest in the continental U.S. as of 2010. Therefore, the addition of the shipping activity associated with one additional ocean-going carrier per day (in the initial phase) would be minor in comparison to the ongoing port activities. Automotive transportation impacts would be limited to construction activities conducted by up to ten construction workers, the vehicle traffic associated with the seven facility operations staff, and approximately ten vessel crew. This would be a negligible addition to the current automotive transportation in and out of the port. Therefore, because the impacts associated with the proposed action would be negligible to the overall cumulative transportation impacts; this resource was not analyzed further.</p>
<b>Utilities</b>	<p>The CNG facility at the Port of Palm Beach would be located within an existing industrialized port complex in which electricity, potable water, sewage collection and treatment facilities, etc. are readily available. At the Port of Palm Beach, the proposed CNG facility's needs for natural gas would be supplied by the Riviera Lateral line which is immediately accessible to the project site. The CNG facility's needs for potable water and subsequent generation of sewerage wastewater would be limited to the small office facility on-site.</p> <p>Electric needs for the CNG facility are anticipated to be approximately 30-35 megawatts-hours (MWh) per day. The Port of Palm Beach's neighbor east of U.S. 1 and south of the Port is the Florida Power and Light (FPL) Riviera Beach Power Plant. There are transmission lines on the port facility in the vicinity of the proposed project site. Therefore, electricity would be readily accessible and the CNG facility would not cause a significant load increase.</p> <p>Consequently, because the impacts associated with the proposed action would be negligible to the overall utilities on and around the Port of Palm Beach, and within the City of Riviera Beach and Palm Beach County, this resource was not analyzed further.</p>

## **1.4 CONSULTATIONS AND PUBLIC COMMENTS**

### **1.4.1 Consultations**

Prior to the release of the draft EA for public comment, DOE sent project information to the agencies and tribal governments for their consideration. Agencies and tribal governments consulted include:

- U.S. Fish and Wildlife Service (USFWS)
- National Oceanic and Atmospheric Administration (NOAA) Marine Fisheries Service
- NOAA Office of Ocean and Coastal Resource Management
- Florida Department of Environmental Protection (FDEP)
- Florida State Historic Preservation Office (SHPO)
- United States Army Corps of Engineers (USACE)

- United States Coast Guard (USCG)
- United States Environmental Protection Agency (EPA)
- The Seminole Tribe of Florida
- The Seminole Nation of Oklahoma

No comments were received from these agencies prior to release of the draft EA.

#### **1.4.2 Comment-Response Process**

DOE encourages public participation in the NEPA process. DOE issued the draft EA for comment on February 13, 2015, and advertised its release in South Florida Sun Sentinel on February 13, 14, and 15, 2015. In addition, DOE sent a copy for public review to Riviera Beach Public Library, 600 E. Blue Heron Blvd, Riviera Beach, FL, 561-845-4195. DOE established a 30-day public comment period beginning on February 13, 2015, and ending on March 18, 2015, and announced that comments would be accepted by mail, email, or facsimile. The draft EA was also sent to federal, state, and local resource agencies. Under the federal Coastal Zone Management Act (15 C.F.R. § 930.41), the Florida State Clearinghouse had 60 days from receipt of the document (14 April 2015) to comment on proposed federal actions. Comments received by the close of the comment period were considered in preparing this final EA for the proposed action and are included as part of the official record in **Appendix D**. Late comments were accepted to the extent practicable.

A total of 58 comments were received from 7 agencies during the comment period including the USFWS, FDEP, Florida Fish and Wildlife Conservation Commission, Florida Department of Transportation, Florida SHPO, City of Riviera Beach, and the Town of Palm Beach. No comments were received from the U.S. Army Corps of Engineers, U.S. Coast Guard, NOAA National Marine Service, Federal Emergency Management Agency (FEMA), U.S. Environmental Protection Agency (EPA), Region 4, Seminole Tribe of Florida, or Seminole Nation of Oklahoma. No comments were received from individual concerned citizens.



## **2.0 DOE PROPOSED ACTION AND ALTERNATIVES**

This chapter describes DOE's proposed action, the proposed project, the No-Action Alternative, and the alternatives considered but eliminated from further consideration.

### **2.1 DOE'S PROPOSED ACTION**

FERC granted Emera's petition for a declaratory finding that the proposed facilities and operations are not subject to FERC's jurisdiction under the NGA (**Appendix E**). DOE's proposed action is to grant authorization under Section 3 of the NGA 15 U.S.C. §717b and Part 590 of the DOE regulations 10 CFR §590 in response to Emera's Application to export natural gas as CNG. Although the Emera application requested authorization to export CNG in an amount up to 9.125 Bscf/yr (25 MMscfd), the EA evaluated CNG production up to 8 MMscfd for the initial phase, consistent with the site layout diagrams and project scope provided by Emera. Expansion of the facility to 25 MMscfd may occur at a later time and would require a separate environmental review, as appropriate. The CNG exports would occur via trailers, tank containers, and ocean-going carrier from a facility to be constructed and operated at the Port of Palm Beach, in the City of Riviera Beach, in Palm Beach County, Florida, to a facility in Freeport Harbour, Grand Bahama Island.

DOE's authorization would be for the exportation of CNG from the Port of Palm Beach to non-FTA countries. The proposed project is included in the scope of DOE's NEPA review as a connected action, as described below.

### **2.2 THE PROPOSED COMPRESSED NATURAL GAS FACILITY**

Under the proposed action, Emera would export CNG via trailers, tank containers, and an ocean-going carrier from a facility constructed at the Port of Palm Beach, in the City of Riviera Beach, in Palm Beach County, Florida to a facility capable of receiving and transmitting CNG at Freeport Harbour, Grand Bahama Island.

#### **2.2.1 Project Location and Site Plan**

The proposed site for the project is on the Port of Palm Beach in the City of Riviera Beach in Palm Beach County, Florida. The Port of Palm Beach is located 80 miles north of Miami and 135 miles south of Port Canaveral (**Figure 2.1**). Specifically, the Port of Palm Beach is located in Sections 33 and 34, Township 42 South, and Range 43 East with approximate central coordinates as follows: Latitude: 26.7662° and Longitude: -80.0521°. The physical address of the Port of Palm Beach is One East 11th Street, Suite 600 Riviera Beach, FL 33404.

The proposed location for the CNG facility would be approximately two acres in the southwestern quadrant of the Port. The ocean-going carrier would be berthed in the vicinity of the existing Slip Number 3 located approximately 0.25 mile directly east of the proposed facility location (**Figure**

**2.2).** Representative photos of the lease area proposed for the CNG facility at the Port of Palm Beach are included as **Figure 2.3**.

The ship entrance would be through the Lake Worth Inlet, a channel 300 feet wide with no aerial obstructions leading into Lake Worth Lagoon (**Figure 2.2**). As reported in the *Port of Palm Beach Master Plan Update* (CH2M Hill and Martin Associates 2013), the Port of Palm Beach is the fourth busiest container port of Florida's 14 deepwater ports and is the twenty-first busiest container port in the continental United States as of 2010. The Bahamas Celebration multi-day cruise/ferry and the Island Breeze casino cruise ship are based at the Port of Palm Beach. The Port of Palm Beach also handles diesel fuel, molasses, liquid asphalt, and other bulk commodities within its 156 acres (CH2MHill and Martin Associates 2013; Sortal 2014). There are a total of three slips, 17 berths and 127 bays available at the Port of Palm Beach.

### **2.2.2 Facility Description**

The initial phase of the proposed CNG facility at the Port of Palm Beach would include:

- a series of five twin compressor packages
- a gas dryer
- 13-16 filling posts for the trailers to enable simultaneous filling of the tank containers
- an office/control building

Examples of the equipment that would be utilized at the compression facility are shown in **Figure 2.4**. In addition, a distribution connection and metering station supplied by the gas utility, a utility transformer, associated equipment and electrical machinery, a small maintenance building, and potentially a small diesel storage tank for terminal tractor fuel would also be located within the CNG facility footprint. The proposed facility layout is shown in **Figure 2.5**.

Emera is in the process of optimizing the layout with the compression equipment supplier in the United States. Therefore, the site layout depicted in **Figure 2.5** is only preliminary until that process is complete. While it is possible the facility configuration could change, the types and quantities of equipment that would be present on the site would not be anticipated to change for the initial phase. In a subsequent phase(s) to expand to 25 MM scfd, it is expected that additional equipment of the same type would be used on the existing leased site and/or a newly leased nearby site.

### **2.2.3 Construction**

It is envisioned that the proposed CNG facility would be completed in phases. The initial phase (described in **Section 2.2.2** Facility Description) would allow compression of approximately 8 MMscfd of CNG to serve Emera's initial market on Grand Bahama Island. Completion of an additional phase (which will be contingent on finding suitable markets, available gas supply, and

lease space at the Port of Palm Beach) could bring the total capacity of the CNG facility to an average of 25 MMscfd. Construction of the initial phase of the CNG facility at the Port of Palm Beach would be expected to take four to six months and would consist of civil works associated with the ground preparation, installation of foundations for the building and equipment pads, installation of electrical and utility trenches, installation of natural gas pipelines and equipment, and anchoring of the equipment. A total of up to ten construction workers would be anticipated to be on the site each day throughout the construction period.

#### **2.2.4 Proposed Project Operations**

Operations at the CNG facility at the Port of Palm Beach would have a minimum 20 year term and include the following:

- Inflow and outflow of roll trailers (also known as “MAFI” trailers) routinely used to carry containers (**Figure 2.4**)
- Filling of the tank containers with high pressure natural gas at the filling posts (**Figure 2.4**),
- Offloading and loading onto ocean-going carrier (a roll on/roll off [RO/RO] cargo carrier). Design for the RO/RO vessel has not been finalized yet, however, gross tonnage is expected to be approximately 1400-1500 metric tonnes with a length of approximately 260-290 feet and not to exceed 300 feet.
- Inflow and outflow of ocean-going carrier into the slip

During the initial phase where the facility would compress up to approximately 8 MMscfd, it is anticipated that up to 16 MAFI trailers would enter and exit the facility per day. Additionally, in the initial phase, one ocean-going carrier would enter and exit the slip per day. In future phases a single additional ocean-going carrier may be required. Natural gas would be delivered to the CNG facility via intrastate pipeline. Slip 3 would be the primary berth for the ocean-going carrier; however, other adjacent berths within the Port could also be utilized. Finally, port facility operations would include regular maintenance activities. During the initial operations, two full-time staff would maintain the CNG facility, five staff would be employed for facility and loading operations, and approximately ten crew members would operate and maintain the ocean-going carrier. Subsequent phases could require similar staffing complements and additional MAFI trailers depending on the distance to future markets and the operational requirements.

Transit time from the Port of Palm Beach to Freeport Harbour, a distance of 75 nautical miles, is anticipated to take eight hours each direction. Loading trailers onto the ocean-going carrier is estimated to require six minutes per trailer with a total estimated loading time of about one to two hours. Unloading trailers from the ocean-going carrier is estimated to require six minutes per trailer with a total estimated unloading time of approximately one to two hours. The loading and unloading at the Port of Palm Beach and Freeport Harbour is anticipated to require a total of two

to four hours each. Thus, the total gas delivery cycle time is approximately 24 hours per round trip. The annual volume of gas transmitted would be anticipated to be up to 2920 MMscf (up to 8MMscfd in the initial phase).

The Peninsula Pipeline Company (PPC), a wholly owned subsidiary of Chesapeake Utilities Corporation and a gas transmission company operating within the State of Florida, is in the final stage of purchasing the existing 12-mile, 8-inch steel Riviera Lateral that terminates at the Port of Palm Beach from Florida Gas Transmission (FGT) company. PPC would convert the existing Riviera Beach lateral pipeline from a FERC regulated interstate pipeline to a state regulated intrastate pipeline. PPC proposes to construct and operate all gas distribution components required to provide service from their intrastate pipeline to Emera's facility at the Port of Palm Beach.

Gas shall be procured in the competitive United States interstate market, and Emera would secure commitments for firm transportation capacity on the FGT interstate pipeline to allow for delivery to the Riviera Lateral.

The inlet pressure to the compression facility would be 300 pounds per square inch gauge (psig). The compressor discharge pressure would be 4,500 psig (rated). For the initial project phase, there would be a total of ten "W" Configuration Reciprocating Compressors in five twin compressor packages. Each compressor is driven by a 300 horsepower (HP) electric motor. The tank containers would be operating at approximately 3,600 psig. The total amount of gas per MAFI trailer would be approximately 500,000 standard cubic feet.

Potential waste streams generated by facility construction and operation may include contaminated water from the dryer, spills of fluids associated with machine and vehicle operations and maintenance (oils, gas, battery fluid, lubricants, etc.), stormwater, wastewater, solid waste, air emissions associated with machine and vehicle operations, and venting of natural gas. Contaminated water (estimated to be 730 gallons per year with natural gas liquids varying with the gas quality during the initial phase, with similar volumes anticipated for each subsequent phase) from the gas dryer would be collected for off-site disposal.

### **2.2.5 Start-up, Shutdown, Maintenance, and Emergency Conditions**

A start-up and commissioning plan specific to the Port of Palm Beach facility would be developed jointly between Emera and the engineering contractor to ensure a safe start-up of the facilities. The plan would be based on Emera standard processes and standard processes the engineering contractor utilizes for other facilities across the United States. Similarly, Emera and the engineering contractor would develop maintenance procedures also based on standard plans utilized at other facilities.

Potential accidental releases could be comprised of natural gas, fuels, lubricants, or other maintenance and operations-related hazardous substances. Preventative measures will be

developed and implemented in a written safety plan compliant with OSHA and National Fire Protection Association (NFPA) regulations during both construction and operation phases of the project. In the event of an accidental gas release, fire, or spill of hazardous material, the appropriate local authorities will be contacted for emergency services beyond those available on site, if necessary. During transit to the Bahamas and other destinations, International Convention for the Prevention of Pollution from Ships (MARPOL) regulations would be followed to prevent accidental spills and accidents and to minimize potential impacts after an accidental release.

Potential workforce accidents targeted for prevention include slips, trips and falls, vehicle collisions and persons overboard during shipping. Extensive safety plans would be developed and adhered to in order to prevent such accidents and to minimize harm to persons if they should occur. The nearest occupied residential areas are located approximately 0.1 miles west and 0.2 miles south of the proposed project site respectively. The nearest schools are located approximately 0.5 miles north and 0.7 miles west of the proposed facility. These residential areas and schools would be included in the emergency plans for the facility.

A preliminary “Emergency Response Plan” has been prepared by Emera’s engineering contractor based on plans developed for numerous other natural gas fueling stations across the United States. Emera and the engineering contractor would work with the Port of Palm Beach and the City of Riviera Beach to ensure the CNG facility’s Emergency Response Plan is consistent and compliant with the Port’s requirements and any relevant city regulations.

Elements covered by the Emergency Response Plan would include:

- Station Operation and Equipment
- Hazards
- Possible Emergencies
- Emergency Shutdown System Overview
- Compression Facility Safety Equipment
- What to do in the event of a gas leak
- Notifications
- Responsibilities during a serious emergency
- Written Reports
- Training and Exercise Drills

### **2.2.6 Decommissioning**

Post-operational requirements would be comprised of equipment removal and reuse or disposal and removal of the control building, if required. The lease area would be available for other tenants.

### **2.2.7 Permits, Approvals and Applicant Committed Actions**

All federal, state, and local project reviews and permits will be initiated upon completion of the preliminary facility design package. An initial screening of potential permits and approvals has been completed and is summarized in **Table 2-1**. Should the need for additional permits be identified in the future, Emera would comply with all state, federal, and local regulations and guidance.

**Table 2-1. Summary of Environmental Permitting and Approval Requirements Port of Palm Beach, Florida Proposed CNG Facility**

Permit, Approval, or Certification	Responsible Agency	Applicability Criteria	Required Actions	Permitting Schedule	Comments / Status
<b>Federal Environmental</b>					
Floodplain Construction Compliance	Federal Emergency Management Agency (FEMA) –FDEP	Above-grade fills within a 100- year floodplain.	Request letter of verification from FEMA or FEMA- approved local authority.	Typically 1-3 months.	Pending Discussions with FDEP.
<b>State Environmental</b>					
Environmental Resource Permit (ERP) and Sovereign Submerged Lands Lease	Florida Department of Environmental Protection (FDEP)	Required for projects which affect surface waters, wetlands, or sovereign submerged lands. FDEP coordinates review with other state agencies to address natural resource and cultural resource issues. The Port has a Master Environmental Resource Permit, which will require modification.	Have a Pre-Application Meeting with the FDEP Reviewer who reviews the Port Permit modifications. Prepare and submit an application for an ERP modification to FDEP. Permit must be obtained before construction or grading can begin.	1 month to prepare application. Agency review takes approx. 3 months.	Master Permit for Port simplifies this permit process.
State Construction Permit for Air Emission Facilities	Palm Beach County Florida Department of Health	Construction and operation of facilities generating air emissions.	Application process.	1 month preparation, 2 to 3 months agency review and approval.	The Florida Department of Health in Palm Beach County is authorized by the Florida Department of Environmental Protection to issue permits for air pollution sources in Palm Beach County.
State Operations Permit for Air Emission Facilities	Palm Beach County Florida Department of Health	Operation of facilities generating air emissions.	Application process.	1 month preparation, 2 to 3 months agency review and approval.	Will coordinate with the Palm Beach County Florida Department of Health
Title V Operating Permit	Palm Beach County Florida Department of Health	Operation of facilities generating air emissions.	Prepare permit application using info in PSD permit, update as appropriate based on final facility operational parameters and add additional information as required.	1 to 3 months to prepare application, 6 months to 1 year for agency review and approval. Application required within first 12 months of operation.	Unlikely - Pending Discussions with FDEP.
Section 401 Water Quality Certification (Clean Water Act)	Florida Department of Environmental Protection (FDEP)	Projects with potential to impact waters of the state.	Review concurrent with ERP review.	No separate application required. Approx. 3 months as part of ERP Permit processing.	This certification will be issued with the ERP Permit Modification listed above.
Emergency Response Plan/Risk Management Plan	FDEP, EPA Region IV	Storage of significant quantity of hazardous chemicals or materials on-site.	To be prepared prior to operation, if required, but will depend on the quantity of materials stored on the site.	4 to 8 weeks to prepare.	Pending discussions with FDEP.
NPDES Construction Stormwater Permit /Stormwater Pollution Prevention Plan	Florida Department of Environmental Protection (FDEP)	Construction of any facility that disturbs 1 acre or more.	Prepare a Notice of Intent and SWPPP for Construction, Submit NOI at least 1 week prior to construction.	2 weeks to prepare, 2 days to achieve permit coverage.	The NOI gets submitted to FDEP in Tallahassee.

**Table 2-1. Summary of Environmental Permitting and Approval Requirements Port of Palm Beach, Florida Proposed CNG Facility (continued)**

Permit, Approval, or Certification	Responsible Agency	Applicability Criteria	Required Actions	Permitting Schedule	Comments
NPDES <i>Operating</i> Stormwater Permit for Industrial Activities	Florida Department of Environmental Protection (FDEP)	Operation of an industrial facility.	Emera signs as a new tenant to the Port of Palm Beach's Multi-Sector Generic Permit for Stormwater Discharge Associated with Industrial Activity (MSGP).	1 month to prepare, 2 to 3 weeks for agency review and approval.	Will coordinate with the Port of Palm Beach and FDEP to determine if modifications are needed for the Port's MSGP.
<b>Local Permitting/Approvals</b>					
Site Plan Approval	City of Riviera Beach	Site Plan.	Submit Site Plan approval application package.	1 month to prepare application and 3-4 months for processing/approval.	Coordination with Port & City of Riviera Beach.
Water and Sewer Connection	City of Riviera Beach, Palm Beach County Health Department (PBHD)	New water and sewer connections.	Submit request for water meter or sewer connection to City and PBHD.	Normally 1 to 2 months for approval.	Will coordinate with City of Riviera Beach and PBHD.
Zoning/Land Use Compliance	City of Riviera Beach	May be required to address local zoning requirements that apply specifically to this type of facility.	Zoning request. Application for Conditional Use Permit may be required.	If Conditional Use Permit is needed, a public hearing(s) will be required and will require scheduling. Typical timeframe for process is 3 to 12 months.	Will coordinate with City of Riviera Beach.
Floodplain Development Permit Application	City of Riviera Beach Building Division	Above-grade fills within a 100- year floodplain.	One-page form.	Submitted as part of Building Permit Process.	Will coordinate with Port and City of Riviera Beach.
Building Permit; Plumbing Permit; HVAC Permit;	City of Riviera Beach	Construction of new buildings and facilities.	Application to the City.	Normally 2 months for approval.	Will coordinate with City of Riviera Beach.
<b>Other Permits/Approvals</b>					
Florida Public Utilities (FPU)		Construct natural gas pipeline from present location to Port.	FPU Engineers must complete a preliminary survey of the project prior to establishing a schedule.		Florida Public Utilities Applying to Regulatory Agencies; Outside Emera Scope of Work.
Hazmat Safety	US Department of Transportation - Pipeline and Hazardous Materials Safety Administration	Movement of hazardous materials to industry and consumers by all modes of transportation.	DOT Special Permit.		May or may not apply to proposed operation.

**ASSUMPTIONS (Partial List)**

Florida Public Utilities supplies natural gas pipeline to site. Site is in upland area.

Should the need for additional permits be identified in the future, Emera would comply with all state, federal, and local regulations and guidance.



### **2.3 NO-ACTION ALTERNATIVE**

Under the No-Action Alternative, DOE would not authorize the export of CNG. Consequently, Emera would not construct or operate the CNG facility at the Port of Palm Beach, Florida and thus there would be no impacts to the human or natural environment. Conditions at the Port of Palm Beach site would remain as they are at present.

### **2.4 OTHER ALTERNATIVES CONSIDERED BUT ELIMINATED FROM FURTHER EVALUATION**

When initially exploring the feasibility of the project, Emera authorized a study to assess available gas pipeline capacity in Florida as well as the land availability, ship-loading capability, and proximity to the Bahamas. This narrowed the locations to review in more detail down to three; Port Everglades, Port St. John, and the Port of Palm Beach. Port Everglades and Port St. John were eliminated as alternatives due to lack of available natural gas pipeline capability in close proximity to the port facilities. The Port of Palm Beach was selected because of the closer proximity to Grand Bahama, the available facilities, and existing gas pipeline capacity. After the Port of Palm Beach was selected, and the project concept evolved, several potential project sites within the Port were reviewed with respect to availability, size and flow of traffic to the ship loading area.

Prior to developing the present CNG concept Emera considered other alternatives, all of which were determined to be uneconomic:

- Undersea natural gas pipeline from Florida to Grand Bahama
- Undersea electricity cable from Florida to Grand Bahama
- Liquefied Natural Gas (LNG) supply via International Organization for Standardization (ISO)-container trailer on the RO/RO vessel.

### **3.0 AFFECTED ENVIRONMENT AND ENVIRONMENTAL CONSEQUENCES**

The following sections describe the affected environment and the potential environmental consequences associated with implementation of the proposed action and the No-Action Alternative. Impacts from both construction and operations are included in this analysis.

#### **3.1 WATER RESOURCES**

This section provides a discussion of the water resources near the proposed project site and the potential impacts to these resources that could result from implementation of the proposed action or the No-Action Alternative. Information presented includes groundwater and surface water (including floodplains and wetlands) for the proposed project area. Mitigation measures to reduce potential impacts on water resources are also discussed.

##### **3.1.1 Affected Environment**

###### **3.1.1.1 *Groundwater***

The Port of Palm Beach overlies Florida's surficial aquifer system, a system of undefined aquifers present near the land surface which are recharged by rainfall. These aquifers are used primarily for domestic, commercial, or small municipal water supplies. The Palm Beach County Water Utilities Department draws drinking water from a deeper aquifer, located at a depth of approximately 150 feet (Palm Beach County Water Utilities 2012).

The Port is also located within the streamflow and recharge source zone for the sole-source Biscayne Aquifer. There are no known groundwater wells, piezometers, or groundwater monitoring wells within the Port of Palm Beach. Additionally, the Port is not located within a currently mapped or proposed wellfield zone. The Biscayne Aquifer is the principal source of water for several million people residing in Dade and Broward Counties and the southeastern part of Palm Beach County. The aquifer extends under Biscayne Bay and the Atlantic Ocean and saltwater from these sources has migrated inland in some areas due to lowering of groundwater levels because of the installation of wells and canals. A system of canals, levees, control structures, pumping stations, and water-conservation (storage) areas managed by the South Florida Water Management District (SFWMD) provide flood control in the area and minimize further saltwater encroachment into the aquifer (U.S. Geological Survey 1990).

The Biscayne Aquifer is shallow, lies within a few feet of the ground surface, and is highly permeable. In areas of high recharge, water flowing across the ground surface, as a result of precipitation or flooding, readily and rapidly percolates into the aquifer. Consequently, the aquifer is subject to contamination from surface sources, though the high permeability also allows the rapid clearing of most contaminants. Common sources of contamination include saltwater encroachment; infiltration of contaminants carried in canal water; direct infiltration of

contaminants spilled on the land surface such as chemicals, pesticides, and fertilizers; landfills, septic tanks, sewage-plant treatment ponds; stormwater wells; and industrial waste wells.

Known contamination sites underlain by the Biscayne Aquifer include numerous hazardous waste sites and three unlined landfills. Many of these known contaminant sites are in the process of being remediated to prevent further contamination (U.S. Geological Survey 1990).

### **3.1.1.2 Surface Water**

The Port of Palm Beach is located on the western side of the Lake Worth Lagoon, a 20.5 mile long estuary paralleling the coast and separated from the Atlantic Ocean by barrier islands. The lagoon covers approximately 450 square miles from North Palm Beach to Boynton Beach, Florida and ranges from approximately 6-10 feet in depth. Lake Worth Creek (which is fed from the Loxahatchee River and Jupiter Inlet to the north) empties into the north end of the lagoon (CH2M Hill and Martin Associates 2013).

When the area was first settled, Lake Worth was a freshwater lake bounded and isolated from the Atlantic Ocean by a barrier island. The lake was supplied by a constant flow of freshwater from the mainland. During the late 1800s to early 1900s, inlets were dug through the barrier island resulting in the formation of the marine lagoon (CH2M Hill and Martin Associates 2013).

Environmental issues currently affecting the Lake Worth Lagoon include impacts associated with increases in population and altered hydrology and large-scale fresh water releases from regional canals causing habitat stress and loss, and potential degradation of water quality in the lagoon (Lake Worth Lagoon Initiative 2013).

Lake Worth is a Class III surface water under Rule 62-302.400 of the Florida Administrative Code (FAC). Designated for recreation and for propagation and maintenance of a healthy, well-balanced population of fish and wildlife, minimum water quality standards must be maintained in Lake Worth under the Rule. Water quality classifications are arranged in order of the degree of protection required, with Class I water having the most stringent water quality criteria and Class V the least. However, Class I, II, and III surface waters share water quality criteria established to protect the recreation and habitat values as identified in Rules 62-304.500 and 62-302.530 FAC.

Shipping traffic to and from the Port of Palm Beach utilizes the Lake Worth Inlet, the only major inlet passing between the barrier islands. A smaller inlet is located on the southeastern site of Lake Worth. Daily tidal flushing through the Lake Worth Inlet, which is situated directly east of the Port of Palm Beach, helps buffer the salinity fluctuations in Lake Worth around the Port - defining this area as more of a marine tidal lagoon than a strict estuarine system. Seagrass around the Port is some of the healthiest in the lagoon, likely due to this daily flushing from the inlet (CH2M Hill and Martin Associates 2013).

Pollution sources at Lake Worth Lagoon include stormwater runoff, agricultural runoff, septic tank leachate, and marina operations. The Port of Palm Beach has implemented a stormwater

management plan to limit discharges into the lagoon. Excess stormwater from the Port is directed to retention areas and exfiltration trenches. Stormwater management on the proposed site currently consists of a 66-inch reinforced concrete pipe which discharges into the Lake Worth Lagoon. The Port of Palm Beach holds a National Pollutant Discharge Elimination System (NPDES) permit Multi-Sector Generic Permit for Stormwater Discharge Associated with Industrial Activity (MSGP) which is administered by the FDEP. The Port of Palm Beach is also an active participant in intergovernmental coordination of initiatives to study and improve water and sediment quality, restoration and enhancement of natural resource and wildlife communities, public use and outreach program, and management strategies for the Lake Worth Lagoon (CH2M Hill and Martin Associates 2013; Lake Worth Lagoon Initiative 2013).

A portion of the Intracoastal Waterway, a continuous waterway located between the mainland and barrier islands from Jacksonville and Miami, Florida, is located within the Lake Worth Lagoon (Palm Beach County 2013). Both the Lake Worth Inlet and the Intracoastal Waterway are maintained by the USACE. Lake Mangonia is located approximately two miles to the southwest of the Port of Palm Beach. There are a number of unnamed smaller ponds and streams within two miles of the project site.

### **3.1.1.3 Wetlands and Floodplains**

Based on the U.S. Geological Survey land-cover classification standards and the 2006 National Land Cover Dataset, a small portion of the Port of Palm Beach is classified as Emergent Herbaceous Wetlands. However, the National Wetlands Inventory (NWI) did not identify wetlands on the Port of Palm Beach (U.S. Fish and Wildlife Service 2012). Additionally, the Port of Palm Beach Master Plan reported that no natural vegetative communities exist within the Port (CH2M Hill and Martin Associates 2013). The NWI does identify Estuarine and Marine lagoons (both shallow and deepwater) wetlands within Lake Worth Lagoon and along the Lake Worth Inlet (U.S. Fish and Wildlife Service 2012). An area of mangrove wetlands is located on the northwest side of Peanut Island which is located in Lake Worth Lagoon between the Port of Palm Beach and the Lake Worth Inlet (CH2M Hill and Martin Associates 2013). Wetlands are not present at the proposed CNG facility location at the Port of Palm Beach.

The majority of the Port of Palm Beach, including the proposed CNG facility project site, is designated as Zone C (**Figure 2.10**) which is a low-risk area above the 500-year floodplain. Portions of the Port are designated as Zone B, which is outside the 100-year floodplain, or an area where flooding would be less than one foot or protected from base flooding. The berths are located in Zone A7 which is located within the 100-year floodplain (Federal Emergency Management Agency 1982). FEMA is in the process of updating the flood insurance maps. The revised preliminary maps show the majority of the Port of Palm Beach, including the proposed project area, is located outside of the floodplain. The berth area is located in Zone AE (with a base flood elevation of 6-7 feet). The areas immediately adjacent to the coastline are in Zone X and are designated as having a 0.2% annual chance flood (Federal Emergency Management Agency 2014).

### **3.1.2 Environmental Consequences**

#### **3.1.2.1 Proposed Project Construction**

The proposed CNG facility is located within an area comprised of impervious surface and devoid of natural habitat. Site preparation and construction activities could potentially change stormwater runoff patterns at the proposed project site. The Port maintains master permits from the SFWMD and the USACE which ensure protection of the water resources in and adjacent to the Port. The site is currently covered under these existing permits. Emera would prepare and comply with an SWPPP for project construction. Stormwater from the site would be discharged into the existing stormwater management system and ultimately into the Lake Worth Lagoon. The proposed project would remove some of the existing stormwater exfiltration trenches within the project area and would install new trenches, maintaining stormwater control and limiting discharges into the lagoon. Additionally, Emera would spray disturbed soils (as applicable) with water to suppress fugitive dust as necessary. The water for spraying would be hauled by truck from municipal water sources. Therefore, potential impacts associated with stormwater runoff and/or soil erosion as a result of construction of the proposed project would be greatly minimized and are anticipated to be negligible.

Potential impacts to the surficial aquifer, surface water, wetlands, and floodplains could result from accidental releases of hazardous materials (such as oils, gas, battery fluid, lubricants, etc.) from construction equipment and vehicles. The construction company and Emera would develop and implement a Spill Prevention, Control, and Countermeasure (SPCC) plan to prevent, contain, manage, and clean up hazardous materials releases. The project would not use groundwater or surface water from the site or surrounding area for construction. No reports of soil or groundwater contamination have been identified for the site at this time. Therefore, potential impacts associated with hazardous materials spills as a result of construction of the proposed project are anticipated to be negligible.

As no wetlands are present on the proposed project site, no impacts to wetlands are anticipated as a result of construction activities. Because the proposed project site is located within flood hazard Zone C in an area of minimal flooding, no impacts to floodplains would be anticipated as a result of the construction of the proposed project.

Overall, potential impacts to groundwater, surface water, wetlands, and floodplains associated with construction of the proposed project would be anticipated to be negligible and temporary.

#### **3.1.2.2 Proposed Project Operations**

Operational water requirements for the facility would be limited to water needs for employee comfort stations in the small office facility and small maintenance facility. These facilities would utilize municipal potable water. As described above, potential impacts to the surficial aquifer, surface water, wetlands, and floodplains could result from accidental releases of hazardous materials (such as oils, gas, battery fluid, lubricants, etc.) from operations activities. Emera would

develop and implement an SPCC plan to prevent, contain, manage, and clean up hazardous materials releases. The project would not use groundwater or surface water from the site or surrounding area for operations. Potential waste streams generated by station operation may include contaminated water from the dryer and sanitary water from the small office facility and small maintenance facility. Contaminated water (estimated to be 730 gallons per year with natural gas liquids varying with the gas quality during the initial phase, with similar volumes anticipated for each subsequent phase) from the gas dryer would be collected for off-site disposal at an approved facility. Samples from the dryer wastewater would be collected before disposal and profiled to determine the composition and concentration of any hazardous substances, Emera is assuming it would likely be hazardous and would be handled accordingly until confirmed. Sanitary water from the office facility would be handled by a tie-in to the Port of Palm Beach's sanitary systems. The SPCC would include procedures to deal with accidental releases of contaminated dryer water. As discussed previously, the Emera project would be required to sign off on and comply with the stipulations of the Port's MSGP and SWPPP. Emera would consult with the Port of Palm Beach and the FDEP to ensure both the project and the Port are in full compliance with local, state, and federal requirements. Therefore, potential impacts associated with hazardous materials spills as a result of operations of the proposed project are anticipated to be negligible.

Seawater is typically taken in and discharged from ships as needed to maintain ship trim and stability. Also standard in marine transport, sea-water would be circulated through the ocean-going carrier's boilers, generators, and heating, ventilation, and cooling (HVAC) system during transit to provide cooling. The use of seawater for ballast or cooling would not have an impact on water quality. The water used for cooling would have a higher temperature upon discharge compared with intake. During transport, the ocean-going carrier would comply with the appropriate MARPOL regulations to minimize potential impacts from ocean-going carrier waste during trips to and from the island of Grand Bahama and other potential destinations. No impacts to surface water would be anticipated as a result of water used for ballast and cooling.

Operations of the proposed project would have no anticipated impacts on floodplains or wetlands. The use of standard best management practices would prevent contamination of water bodies during operations; therefore, impacts to water resources as a result of operations should be negligible.

### **3.1.2.3 *No-Action Alternative***

Under the No-Action Alternative, Emera would not be authorized to export CNG from the Port of Palm Beach and the proposed project would not be constructed. Operations at the Port would continue as they are at present and as detailed for the future in the Port of Palm Beach Master Plan. No new short-term or long-term impacts to water resources would be anticipated to occur as a result of implementation of the No- Action Alternative.

## **3.2 AQUATIC RESOURCES**

This section provides a discussion of the aquatic resources near the proposed project site and the potential impacts to these resources that could result from implementation of the proposed action or the No-Action Alternative. Information presented includes a discussion of overall marine life and habitats as well as threatened and endangered marine species within the proposed project area. Scientific names of referenced flora and fauna are summarized in **Appendix C**.

### **3.2.1 Affected Environment**

#### **3.2.1.1 *Marine Life***

The Lake Worth Lagoon is an estuarine lagoon of high seasonal variation in salinity due to the presence of inlets and high fluctuation in freshwater flow levels from the mainland. Areas of Lake Worth around the Port of Palm Beach and the Lake Worth Inlet experience less fluctuation due to the daily flushing through the inlet. Therefore, this area has more of a marine tidal lagoon habitat than strictly estuarine habitat. Major marine resources in Lake Worth Lagoon include seagrasses, fish and other aquatic life, manatees, and sea turtles (CH2M Hill and Martin Associates 2013; Lake Worth Lagoon Initiative 2013).

Peanut Island, located in Lake Worth Lagoon just north of the Port of Palm Beach and the Lake Worth Inlet, provides feeding areas in the shallow intertidal flats around the island. A population of beach star, a state-endangered plant, is present on Peanut Island. An area of mangrove wetlands is present on the northwestern side of the island (CH2M Hill and Martin Associates 2013).

The Port of Palm Beach is one of the sponsors for the restoration and enhancement of Peanut Island, including protection of the beach star population and mangroves. Palm Beach County is leading the program and developing a county park on the island. Exotic, invasive Australian pines have been removed from the island and been replaced with native and non-invasive species. Portions of the island are used for dredge material disposal by the Port of Palm Beach and the Florida Inland Navigation District (for maintenance of the Intracoastal Waterway).

Vegetation has been planted along the dredge disposal areas to reduce soil erosion. Trees and shrubs across the island serve as roosting sites for wading birds that utilize the surrounding intertidal area (CH2M Hill and Martin Associates 2013).

#### **3.2.1.2 *Seagrasses***

Seagrasses provide physical habitat and shelter for various marines species, affect water flow, contribute to nutrient cycling and organic carbon production and export, help stabilize sediment, enhance biodiversity, provide trophic transfers to adjacent habitats, and are part of the food web structure in marine environments. Seagrasses are an important food source for the endangered manatees and green sea turtles. Additionally, seagrasses provide habitat for many commercially

and recreationally important fishery species. Several species utilize seagrass meadows as nursery grounds; others use them as shelter during juvenile stages (Lake Worth Lagoon Initiative 2013).

Seven species of seagrasses are found within Palm Beach County:

- Turtle grass (*Thalassia testudinum*)
- Manatee grass (*Syringodium filiforme*)
- Shoal grass (*Halodule wrightii*)
- Paddle grass (*Halophila decipiens*)
- Star grass (*Halophila engelmannii*)
- Johnson's seagrass (*Halophila johnsonii*) - federally listed as an endangered species
- Widgeon grass (*Ruppia maritima*)

Palm Beach County has mapped extensive seagrass cover throughout Lake Worth Lagoon, including in the vicinity of the Port of Palm Beach. Aerial mapping from 2007 indicated that seagrass beds covered nearly 22 percent of the lagoon. Restoration projects that have been conducted since that time likely have increased this percentage, though mapping efforts to confirm this have been unsuccessful (Lake Worth Lagoon Initiative 2013). Shoal grass is the most abundant species present occurring primarily within shallow flats and undredged areas. No seagrasses have been mapped in the Lake Worth Inlet or dredged areas of the Port. The largest expanses of seagrass are located south of the Port and north of Peanut Island (CH2M Hill and Martin Associates 2013).

Johnson's seagrass is the first marine plant species to be listed under the Endangered Species Act (ESA). The species' known geographic distribution is limited to the east coast of Florida, from Sebastian Inlet to central Biscayne Bay. The largest distribution of Johnson's seagrass is within the Lake Worth Lagoon and Inlet. Two areas of NOAA National Marine Fisheries Service-designated Critical Habitat for Johnson's seagrass are located within the lagoon. Occurrences of the species are often patchy and non-contiguous, typically located within coarse sand and ample substrate in areas with turbid waters and high tidal currents. The species appears to be more tolerant of salinity, temperature, and desiccation variations as compared to other Florida seagrass species. Endangered manatees and green sea turtles are known to feed on the *Halophila* species and the Johnson's seagrass may be a significant component of their diet (Lake Worth Lagoon Initiative 2013).

Stormwater runoff and discharge constitute the greatest threat to the long-term health and expanses of the seagrasses present in the Lake Worth Lagoon. Recent water quality improvements are believed to contribute to the seagrass' recovery near the Port of Palm Beach. Monitoring of seagrass health to serve as a major indicator of lagoon health is part of a management plan for Lake Worth Lagoon. Projects to restore and enhance seagrass habitats are



being successfully implemented as part of the Lake Worth Lagoon Initiative (CH2M Hill and Martin Associates 2013; Lake Worth Lagoon Initiative 2013).

DOE initiated informal consultation regarding species and habitats potentially impacted by the proposed action with the USFWS and the NOAA Fisheries Service on October 15, 2014. During the public comment period, the USFWS and the Florida Fish and Wildlife Conservation Commission provided comments on the draft EA. Those comments have been addressed in the following sections of this final EA and are summarized in **Appendix D**.

### **3.2.1.3 Benthic Communities and Fish**

Algal beds, sand flats, and hardbottom marine resources are also found throughout the Lake Worth Lagoon in the vicinity of the Port of Palm Beach. Due to the proximity of the ocean and the excellent flushing from the Lake Worth Inlet, the channel walls and inlet jetties are expected to support a variety of attached algae, sponges, mollusks, hydroids, crustaceans, and other hardbottom organisms. Important crustaceans that likely utilize the wall and hardbottom habitats may include the spiny lobster (*Panulirus argus*) and the blue crab (*Callinectes sapidus*). Fish expected in the area include members of the snapper, grunt, and grouper families and the hardier reef fishes including parrotfish, damselfish, spadefish, triggerfish, angelfish, puffers, and others. Larger predatory fish such as tarpon, barracuda, and shark may also use the inlet and channel. Species including mullet, jacks, and yellowtail likely traverse the inlet and channel area. The seagrass beds and sand flats provide habitat for skates, rays, flounder, wrasses, mojarras, and juvenile fishes of several groups (CH2M Hill and Martin Associates 2013; Lake Worth Lagoon Initiative 2013).

### **3.2.1.4 West Indian Manatee**

As reported in the Port of Palm Beach Master Plan, the West Indian manatee (*Trichechus manatus latirostris*) frequents Lake Worth area waters, particularly in the winter season (December through March). The manatee is a federally-listed endangered species and Lake Worth Lagoon is Critical Habitat designated by the USFWS. Manatees are particularly attracted to warm water discharges from the FPL Riviera Beach power generating plant in the vicinity of the Port of Palm Beach (Catanese Center for Urban and Environmental Solutions at Florida Atlantic University and Ecological Associates, Inc. 2007; CH2M Hill and Martin Associates 2013). The Lake Worth Lagoon also has abundant submerged seagrass beds which serve as feeding grounds for the manatees. Watercraft-related manatee mortalities have been recorded in and around Lake Worth and the Lake Worth Inlet. Though none of the deaths have been directly correlated to large vessel traffic related to port activities, the mortality rate was highest in vicinity of the Port of Palm Beach, Peanut Island, and the FPL power plant due to the combination of high numbers of manatees and high densities of sea-vessel traffic (Catanese Center for Urban and Environmental Solutions at Florida Atlantic University and Ecological Associates, Inc. 2007; CH2M Hill and Martin Associates 2013).

Manatee protection areas have been established in the vicinity of the Port by Palm Beach County with the approval of the Florida Fish and Wildlife Conservation Commission and the USFWS. These areas consist of speed and wake control zones in shipping channels. The portion of Lake Worth Lagoon between the Port and the Palm Beach Island to the east is designated as an idle speed, no wake zone. Regulatory zones are enforced by the Florida Fish and Wildlife Conservation Commission, Florida Marine Patrol, Palm Beach County Marine Officers and other law enforcement agencies (Atlantic Intracoastal Florida Inland Navigation District 2011; PBS&J, SeaGrant Florida, and Gorzelany 2009). The portion of Lake Worth immediately adjacent to Lake Worth Inlet is also designated as a slow speed, minimum wake zone. In 2007, Palm Beach County instituted a county-wide Manatee Protection Plan which includes protection measures throughout Lake Worth Lagoon (Catanese Center for Urban and Environmental Solutions at Florida Atlantic University and Ecological Associates, Inc. 2007). The Port of Palm Beach has constructed compression fenders with a five foot stand-off (typical manatee protection for deep water ports) at approximately two-thirds of its berthing areas. The Port will add fenders to the remaining berthing areas at Slip Number 3, which would be utilized for the proposed project, as part of the bulkhead replacement activities that are currently under construction and are expected to be completed by May 2015 (Catanese Center for Urban and Environmental Solutions at Florida Atlantic University and Ecological Associates, Inc. 2007; CH2M Hill and Martin Associates 2013). FPL supports manatee protection, research, and education efforts and is in the process of constructing a manatee education center at its Riviera Beach plant adjacent to the Port of Palm Beach. This education center will be open to the public in later 2015 (FPL 2014).

### **3.2.1.5    *Sea Turtles***

Three species of federally-listed, threatened or endangered marine turtles nest on beaches in Palm Beach County near the Lake Worth Inlet - the endangered loggerhead turtle (*Caretta caretta*), the threatened green turtle (*Chelonia mydas*), and the endangered leatherback turtle (*Dermochelys coriacea*). All three species have been observed throughout the area in Lake Worth Lagoon and Inlet (CH2M Hill and Martin Associates 2013; Lake Worth Lagoon Initiative 2013). Sea turtle protection is jointly managed by the USFWS for beach nesting areas and by the NOAA for open-ocean concerns.

Juvenile and sub-adult green turtles may use hardbottom and seagrass areas in and around Lake Worth Lagoon and Inlet as developmental habitat for foraging. Sea turtles can become disoriented by lights. As reported in the Port of Palm Beach Master Plan, recent studies indicate this has become a problem in the vicinity of the Port. The Port is coordinating with Palm Beach County to determine whether Port lighting is a contributing factor and, if so, whether the Port can make any alterations to help address the problem. Lighting at the Port is important for security, safety, and operational needs, therefore any proposed changes must be carefully considered (CH2M Hill and Martin Associates 2013).

## **3.2.2 Environmental Consequences**

### **3.2.2.1 *Proposed Project Construction***

Construction of the Emera CNG facility at the Port of Palm Beach is not anticipated to have any impacts on aquatic resources. No construction would occur within the regulated waterways. The Emera project would not involve any construction activities below ordinary high water that would potentially impact any of the aquatic communities within the project area. It is possible that some portion of the construction materials could be delivered by water. As described in **Section 3.1.2.1**, on-land site preparation and construction activities could result in stormwater runoff and soil erosion at the proposed project site. The Port maintains master permits from the SFWMD and the USACE, which ensure protection of the water resources in and adjacent to the Port for all activities including potential stormwater runoff and soil erosion. Emera would develop and comply with an SWPPP for construction. Additionally, Emera would spray disturbed soils with water to suppress fugitive dust as necessary. The water for spraying would be hauled by truck from municipal water sources. Therefore, potential impacts to aquatic resources associated with stormwater runoff and soil erosion as a result of construction of the proposed project are not anticipated.

### **3.2.2.2 *Proposed Project Operations***

The project would not use ocean water from the site or surrounding area for operations. Potential waste streams generated by station operation may include contaminated water from the dryer; however this water will be collected for off-site disposal. Additional waste streams would be sanitary water from the comfort stations in the office and maintenance facility. The sanitary water would be filtered to the Port of Palm Beach's sewer system. As discussed previously, the Emera project would be required to sign off on and comply with the stipulations of the Port's MSGP and SWPPP. Emera would consult with the Port of Palm Beach and the FDEP to ensure both the project and the Port are in full compliance with local, state, and federal requirements. Therefore, potential impacts to aquatic resources associated with operations of the on-land portions of the proposed CNG facility are not anticipated.

Seawater is typically taken in and discharged from ships as needed to maintain ship trim and stability. Also standard in marine transport, sea-water would be circulated through the ocean-going carrier's boilers, generators, and HVAC system during transit to provide cooling. One marine transport per day is expected to be utilized for the proposed action. In 2013, 1,523 ships arrived at the Port. The addition of one additional ship per day would not constitute an appreciable increase in ship traffic. The Bahamas Celebrations multi-day cruise/ferry ship, the Island Breeze casino cruise ship, and Tropical cargo ships travel the same route between the Port of Palm Beach and Grand Bahama which would be used by the CNG ocean-going carrier. The use of seawater for ballast or cooling would not be anticipated to have an impact on aquatic resources. Standard practices would be implemented in association with these activities to minimize the potential for introduction of invasive species. Additionally, because of the close

proximity of the Port of Palm Beach to Grand Bahama, species in the vicinity of both ports are very similar. Therefore, impacts associated with invasive species would not be anticipated. The water used for cooling would have a higher temperature upon discharge as compared to intake. This higher temperature water could attract manatees. The Emera ocean-going carrier would comply with all Port, local, state, and federal procedures, including idle speed/no wake zones for manatee protection, to minimize potential impacts to aquatic resources as a result of project operations. During transport, the ocean-going carrier would comply with the appropriate MARPOL regulations to minimize potential impacts from vessel waste during trips to and from the island of Grand Bahama and other potential destinations.

In conclusion, according to Section 7(a)(2) and the implementing regulations, DOE finds that the actions of the Emera Project would not likely jeopardize the continued existence of any federally-listed species. DOE's no effect determination is based upon the requirements of the Port of Palm Beach's existing NEPA requirements. The port's requirements include a 5-foot horizontal wharf standoff using rubber fendering, which is greater than USFWS's suggested 3-foot dimension. The wharf already exists and would require no modifications for this project.

As reported in the *Port of Palm Beach Master Plan Update* (CH2M Hill and Martin Associates 2013), the Port of Palm Beach is the fourth busiest container port of Florida's 14 deepwater ports and is the twenty-first busiest container port in the continental United States as of 2010. The Port of Palm Beach has been averaging approximately 1,500 to 1,600 vessels per year and the addition of one vessel per day in support of the Emera project would be considered within the range of normal operational ship traffic. Therefore, impacts to aquatic and other biological resources including seagrasses, manatees, and turtles would be anticipated to be negligible as a result of project operations.

### **3.2.2.3 No-Action Alternative**

Under the No-Action Alternative, Emera would not be authorized to export CNG from the Port of Palm Beach and the proposed project would not be constructed. Operations at the port would continue as they are at present and as detailed for the future in the Port of Palm Beach Master Plan. No new short-term or long-term impacts to aquatic and other biological resources would be anticipated to occur as a result of implementation of the No-Action Alternative.

## **3.3 AIR QUALITY AND GREENHOUSE GASES**

This section provides a discussion of air quality near the proposed project site and the potential impacts that could result from implementation of the proposed action or the No-Action Alternative. Information presented includes an assessment of criteria pollutants and greenhouse gases within the proposed project area.

### **3.3.1 Affected Environment**

#### **3.3.1.1 Air Quality**

Ambient air quality is characterized in terms of whether an area complies with the primary and secondary National Ambient Air Quality Standards (NAAQS). The Clean Air Act (42 U.S.C 7401 et seq.) requires the U.S. Environmental Protection Agency (EPA) set national standards for certain criteria pollutants considered harmful to public health and the environment. The six criteria pollutants are carbon monoxide (CO), lead (Pb), nitrogen dioxide (NO<sub>2</sub>), ozone (O<sub>3</sub>), sulfur dioxide (SO<sub>2</sub>), and two categories of particulate matter (PM<sub>10</sub> and PM<sub>2.5</sub> with a median aerodynamic diameter of less than or equal to 10 or 2.5 micrometers respectively). The NAAQS primary standards define levels for each of the criteria pollutants that provide an adequate margin of safety to protect public health. Secondary standards define levels to protect the public welfare including protection against decreased visibility, and damage to animals, crops, vegetation, and buildings. Regions not in compliance with the NAAQS are classified as nonattainment areas (EPA 2012). The Port of Palm Beach is located in an attainment area for all criteria pollutants (EPA 2013a) meaning that the port has good ambient air quality, and a conformity determination (in accordance with the EPA General Conformity Rule for compliance with national ambient air quality standards) is not required. No emissions would be anticipated from the electric compressors at the CNG facility.

#### **3.3.1.2 Greenhouse Gases**

Greenhouse gases trap heat in the atmosphere and have been associated with global climate change (EPA 2013b). The Intergovernmental Panel on Climate Change (IPCC) states that multiple lines of evidence point to continued climate change and that human activities (particularly those resulting in increasing levels of greenhouse gases) are a significant contributing factor to this change (IPCC 2013). The six key greenhouse gases are carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), nitrous oxide (N<sub>2</sub>O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF<sub>6</sub>). The burning of fossil fuels including diesel, gasoline, and natural gas emit CO<sub>2</sub> and CH<sub>4</sub>. Greenhouse gases generally mix fairly well throughout the lower atmosphere; therefore, any emissions from the project site would add to cumulative regional and global concentrations of CO<sub>2</sub> and CH<sub>4</sub>.

### **3.3.2 Environmental Consequences**

#### **3.3.2.1 Proposed Project Construction**

Construction of the Emera facility would cause a slight increase in emissions of all criteria pollutants as a result of the burning of gasoline or diesel fuel in vehicles and construction equipment and the mobilization of fugitive dust as a result of construction activities. Emissions from the vehicles and construction equipment would be from mobile sources for which emissions performance standards would be applicable to source manufacturers, and they are not regulated under the Clean Air Act air permit regulations. Pollutants emitted and mobilized by the

construction activities would be insignificant in total volume. Therefore, it is not necessary to quantify these emissions given the lack of ambient emissions thresholds that could be used to make a determination of the level of effect from these mobile sources on air quality. Emissions from vehicles would be minimized through regular vehicle maintenance.

The primary concern for air quality impacts would be fugitive dust mobilized by construction activities. Such dust has the ability to affect public health and visibility. As described in **Section 3.1.2.1**, Emera would spray disturbed soils with water to suppress fugitive dust as necessary.

Overall, impacts to air quality as a result of construction of the proposed project would be short-term, minor, and controlled through best management practices.

### ***3.3.2.2 Proposed Project Operations***

Emissions associated with the proposed CNG facility operations would include combustion emissions from vehicles, operational venting of hoses and possible emissions associated with natural gas emergency venting or leakage and pressure testing using air. Operational natural gas venting of hoses is estimated to be 800-1200 scfd (equivalent to 0.010% to 0.015% of CNG output). Emera would comply with all federal, FDEP, and Palm Beach County regulatory and permitting requirements for air emissions, therefore, impacts associated with these emissions would be anticipated to be minor. Emissions associated with vehicle use constitute mobile sources and no air permits are required. Proper maintenance of onsite vehicles and equipment would help minimize emissions impacts and such impacts would be anticipated to be minor. Emissions associated with employee vehicles would also be minor.

The facility itself could be considered a potential stationary source of emissions. Stationary sources of air pollution within Palm Beach County are required to obtain permits and licenses from the FDEP and the Palm Beach County Health Department. Possible emissions associated with natural gas emergency venting or leakage from the tanks or compression station would be minor and controlled through standard operating procedures and emergency plans. Emera would coordinate with the FDEP and Palm Beach County Health Department to ensure the facility is in compliance with state air quality regulations.

Overall, air emissions associated with facility operations would be anticipated to be minor. The project would require, and Emera would obtain, construction and operations air permits from FDEP.

### ***3.3.2.3 No-Action Alternative***

Under the No-Action Alternative, Emera would not be authorized to export CNG from the Port of Palm Beach and the proposed project would not be constructed. Operations at the port would continue as they are at present and as detailed for the future in the Port of Palm Beach Master Plan. No new short-term or long-term impacts to air quality would be anticipated to occur as a result of implementation of the No- Action Alternative.

### **3.4 SOLID AND HAZARDOUS WASTE**

This section provides a discussion of the current solid and hazardous waste considerations near the proposed project site and the potential impacts associated with waste that could result from implementation of the proposed action or the No-Action Alternative. Information presented includes an assessment of existing conditions at the proposed project site and anticipated wastes that would be generated as a result of construction and operations of the proposed facility.

#### **3.4.1 Affected Environment**

The proposed site is located within the existing active, industrial Port of Palm Beach facility. The proposed Emera CNG facility would occupy approximately two acres of the 156 acre Port of Palm Beach. The port is a major hub for the shipment of bulk sugar (domestic uses), molasses, cement, utility fuels, water, produce, and breakbulk items. In 2011, the port reported a total volume of two million tons of cargo (CH2M Hill and Martin Associates 2013).

The proposed Emera CNG facility at the Port of Palm Beach would be in an area zoned industrial within which compressing natural gas is a permitted use. The facility would be constructed in a portion of the port that is already paved and that had previous industrial activity. The proposed project site has been used for multiple tenant cargo storage for several years. No waste of any kind is currently being generated at the proposed location.

#### **3.4.2 Environmental Consequences**

##### ***3.4.2.1 Proposed Project Construction***

During construction, the proposed project would generate an estimated 15,000 to 20,000 tons of construction waste over the approximately four to six month construction period. This waste would consist primarily of concrete, pavement, soil, rock, gravel, iron, and steel. Emera would dispose of the waste in a local or regional landfill with sufficient capacity, or recycle it if deemed appropriate.

Potential waste streams generated during construction of the proposed facility may include contaminated water from the spills of fluids associated with machine and vehicle operations and maintenance (oil, gas, battery fluid, lubricants, etc.), stormwater, wastewater, solid waste, and air emissions associated with machine and vehicle operations. Machines and vehicles at the site would be regularly inspected to minimize the potential for spills of fluids (oil, gas, battery fluid, lubricants, etc.). Such spills would generally be treated at the moment of occurrence in accordance with the site's health and safety plan and OSHA regulations. Emera would develop and comply with an SWPPP for construction. Stormwater would be channeled to appropriate existing stormwater collection systems on and offsite which discharge to the Lake Worth Lagoon. Domestic wastewater, if generated, would be conveyed to the site's sewer system. Solid waste would be collected by a contracted firm and transported to an approved offsite landfill. Regular

maintenance of vehicles and machines would ensure air emissions remain within regulatory standards.

The project would not use groundwater or surface water from the site or surrounding area for construction. No known contamination is present in the groundwater or soils at the project site. Therefore, potential impacts associated with hazardous materials spills as a result of construction of the proposed project are anticipated to be negligible.

#### **3.4.2.2 *Proposed Project Operations***

During operations, the proposed project would generate a small amount of recyclables and non-hazardous solid waste per week. Operational waste would include paper waste from office operations, empty containers (i.e. drums, totes, and boxes), lube oil, small parts replacement for equipment, and infrequent desiccant replacement for the dryer. Emera would recycle these materials to the greatest extent practicable. Potential waste streams generated during operations of the proposed facility may include contaminated water from the dryer, spills of fluids associated with machine and vehicle operations and maintenance (oil, gas, battery fluid, lubricants, etc.), stormwater, wastewater, solid waste, and air emissions associated with machine and vehicle operations, and venting of natural gas. Spills of fluids associated with machine and vehicle operations and maintenance (oil, gas, battery fluid, lubricants, etc.) would generally be treated at the moment of occurrence in accordance with the site's health and safety plan and OSHA regulations. Contaminated water (estimated to be 730 gallons per year with natural gas liquids varying with the gas quality during the initial phase, with similar volumes anticipated for each subsequent phase) from the gas dryer would be collected for off-site disposal at an approved facility. Samples from the dryer wastewater would be collected and profiled before disposal to determine the composition and concentration of any hazardous substances. Emera is assuming it would likely be hazardous and would be handled accordingly until confirmed and then disposed of appropriately. The facility would follow the Port of Palm Beach's SWPPP and comply with the Port of Palm Beach's existing NPDES MSGP to minimize any potential impacts to local stormwater systems. Stormwater would be channeled to appropriate stormwater collection systems on and offsite which discharge into the Lake Worth Lagoon. Domestic wastewater, if generated, would be conveyed to the site's sewer system. Solid waste would be collected by a contracted firm and transported to an offsite landfill or recycled if practicable. Regular maintenance of vehicles and machines would ensure air emissions remain within regulatory standards. During transport, the ocean-going carrier would comply with the appropriate MARPOL regulations to minimize potential impacts from ocean-going carrier waste during trips to and from the island of Grand Bahama and other potential destinations.

#### **3.4.2.3 *No-Action Alternative***

Under the No-Action Alternative, Emera would not be authorized to export CNG from the Port of Palm Beach and the proposed project would not be constructed. Operations at the port would continue as they are at present and as detailed for the future in the Port of Palm Beach Master



Plan. No new short-term or long-term impacts associated with solid and hazardous waste would be anticipated to occur as a result of implementation of the No-Action Alternative.

### **3.5 SOCIOECONOMICS**

This section provides a discussion of socioeconomic considerations near the proposed project site and the potential impacts that could result from implementation of the proposed action or the No-Action Alternative. Information presented includes an assessment of population, employment, income, and minority status within the proposed project area.

#### **3.5.1 Affected Environment**

The proposed project is located in the Port of Palm Beach, in the City of Riviera Beach, in Palm Beach County, Florida. Palm Beach County's 2012 estimated population of 1,356,545 reflects a 2.8 percent growth over the 2010 census population of 1,320,134. The City of Riviera Beach's 2012 estimated population of 33,129 reflects a 2.0 percent increase over the 2010 census population of 32,488 (U.S. Census Bureau 2013, 2014).

Palm Beach County hosted an estimated 581,920 jobs over the period of 2008 to 2012. The City of Riviera Beach hosted an estimated 13,536 jobs over the same period (U.S. Census Bureau 2012). **Table 3-1** lists the estimated numbers and types of jobs in each area for the period from 2008 to 2012.

The unemployment rate was 11.2 percent in Palm Beach County for the period from 2008 to 2012. Over the same period, the unemployment rate in the City of Riviera Beach was 16.9 percent (U.S. Census Bureau 2012).

As reported in the 2011 *Port of Palm Beach Master Plan Update*, the Port of Palm Beach supports 2,858 direct, induced, and indirect jobs. Considering jobs with importers and exporters using the port, this number increases by 6,082 related jobs for a total of 8,940 jobs related to the Port of Palm Beach. As of 2011, an estimated 10 and 20 percent of the port's cargo related jobs are filled by residents of the City of Riviera Beach and the City of West Palm Beach, respectively. Approximately 89 percent of the port's cargo related jobs are held by residents of Palm Beach County (CH2M Hill and Martin Associates 2013).

The estimated per capita income of Palm Beach County for 2008 to 2012 was \$33,239, about 25.66 percent higher than the State of Florida per capita income of \$26,451. The estimated per capita income for the City of Riviera Beach for the same period was \$23,252, about 30.05 percent lower than Palm Beach County and 12.09 percent lower than the State of Florida (U.S. Census Bureau 2012).

As of 2011, the Port of Palm Beach has an estimated \$304 million impact on the local and regional economy in terms of direct business revenue, local re-spending and consumption expenditures with an additional \$1.6 billion of the total economic value of moving export cargo

from the production stage to export for a total estimated economic value of \$1.9 billion (CH2M Hill and Martin Associates 2013).

**Table 3-1. Employment Categories and Estimates (2008 to 2012)**

	<b>Palm Beach County Employment Estimate 2008-2012</b>	<b>City of Riviera Beach Employment Estimate 2008-2012</b>
Total	581,920	13,536
Agriculture, Forestry, Fishing, Hunting, and Mining	7,401	52
Construction	40,974	813
Manufacturing	26,555	610
Wholesale Trade	16,671	286
Retail Trade	77,576	1,594
Transportation and Warehousing, and Utilities	26,005	849
Information	11,755	166
Finance and insurance, and real estate and rental and leasing	46,369	922
Professional, scientific, and management, and administrative and waste management services	83,729	1,511
Educational services, and health care and social assistance	120,434	3,419
Arts, entertainment, and recreation, and accommodation and food services	66,108	1,715
Other services, except public administration	35,212	768
Public administration	23,131	831

Source: U.S. Census Bureau 2012

### **3.5.2 Environmental Consequences**

#### **3.5.2.1 Proposed Project Construction**

Up to ten construction workers per day are estimated to be required at the Port of Palm Beach over a period of four to six months to construct the facility. It is likely these jobs would be filled by local or regional construction companies and that no new jobs would be created. There would be no changes to population, infrastructure, or the level of social services available in the area as a result of the proposed action. Some businesses, vendors, and equipment suppliers could experience minor benefits from lease or capital orders to support the construction and from patronage by construction crews to local businesses. Overall, construction related impacts related to socioeconomics would be short-term and minor.

### **3.5.2.2 Proposed Project Operations**

The proposed project would result in a small increase in new jobs. During the initial operations, two full-time staff would maintain the CNG facility, five staff would be employed for facility and loading operations, and approximately ten crew members would operate and maintain the ocean-going carrier. The facility would be anticipated to have a minimum 20 year operational timeframe. Minor increases in staff could occur should facility operations expand at any point during the operational period. It is likely these jobs would be filled by the local population and that no changes to population, infrastructure, or the level of social services in the area would occur. Local businesses, vendors, and equipment suppliers could experience minor benefits from the increased activity at the facility location and through employee patronage of local businesses. Overall, operational impacts associated with socioeconomics would be anticipated to be minor and beneficial.

### **3.5.2.3 No-Action Alternative**

Under the No-Action Alternative, Emera would not be authorized to export CNG from the Port of Palm Beach and the proposed project would not be constructed. Operations at the port would continue as they are at present and as detailed for the future in the Port of Palm Beach Master Plan. No new short-term or long-term impacts to socioeconomic resources and environmental justice would be anticipated to occur as a result of implementation of the No-Action Alternative.

## **3.6 PUBLIC AND OCCUPATIONAL HEALTH AND SAFETY**

This section provides a discussion of public and occupational health and safety considerations near the proposed project site and the potential impacts that could result from implementation of the proposed action or the No-Action Alternative. Information presented includes an assessment of existing emergency response resources in the vicinity of the proposed project site and best management practices the proposed facility would utilize to manage health and safety issues.

### **3.6.1 Affected Environment**

The proposed site for the Emera CNG facility is the Port of Palm Beach, in the City of Riviera Beach, in Palm Beach County, Florida. The proposed site is currently a paved area within the boundaries of the active, industrial port area. A variety of hazardous materials are stored and shipped to and from the port, including some explosive materials such as diesel fuel, oil, ISO tanks, and fireworks. It is assumed that worker accident rates at the Port of Palm Beach are within national averages for similar facilities. The port maintains occupational health and safety plans and operates in accordance with all applicable local, state, and federal standards and requirements.

Emergency services at the Port of Palm Beach are provided by the West Palm Beach Fire Department, Riviera Beach Fire Rescue, and the Riviera Beach Police Department. The West Palm Beach Fire Department Station 3 is located at 500 North Dixie Highway, approximately 4

miles south of the project site. Riviera Beach Fire Rescue Station 1 and the Riviera Beach Police Department are located at 600 West Blue Heron Boulevard, approximately 1.5 miles northwest of the project site.

Occupational health services and emergency medical services are provided by two medical centers located in the City of West Palm Beach. St. Mary's Medical Center is located approximately 0.75 mile southwest of the proposed project site. West Palm Hospital is located approximately 1.8 miles west of the proposed project site. Both hospitals offer paramedic level ambulance service and 24-hour physician coverage in their emergency departments.

The Palm Beach County Department of Public Safety, Division of Emergency Management coordinates emergency mitigation, preparedness, response, and recovery operations throughout the county. The Palm Beach County Comprehensive Emergency Management Plan (2011) presents strategies for the county's emergency management team and agencies to prepare for, mitigate, respond to, and recover from events such as hurricanes, floods, tornadoes, severe weather, wildfires, erosion/subsidence, contagious diseases, man-made disasters, and technological disasters (i.e. domestic security, electrical and utility failures/interruptions), hazardous materials releases, radiological threats, and severe transportation incidents (Palm Beach County 2011). The Palm Beach County Division of Emergency Management is part of the Florida Division of Emergency Management which works to ensure the State of Florida is prepared to respond to, recover from, and mitigate impacts from emergencies.

### **3.6.2 Environmental Consequences**

#### **3.6.2.1 *Proposed Project Construction***

Construction of the facility is anticipated to require a small work force of up to ten workers over a period of four to six months. It is likely that potential worker accidents would remain within the national averages for construction activities. Prior to construction, Emera and its contractors would develop and implement site-specific occupational health and safety plans. Emera would construct the facility in accordance with all applicable company, port, local, state, and federal, and company standards and requirements.

#### **3.6.2.2 *Proposed Project Operations***

Safety and health factors related to operations of the proposed CNG facility at the Port of Palm Beach include medical emergencies to operations staff from work related accidents, the potential for chemical releases to affect the facility or port workers or the surrounding public, fires or explosions, severe weather, technological incidents, or terrorist activities. The greatest potential safety hazard is a fire or explosion related to a leak or rupture at the facility or within the compressed tanks during shipping. Emera would utilize multiple measures to minimize and mitigate these risks. Potential impacts from use and releases of hazardous materials are addressed in **Section 3.4** Occupational safety and health impacts, and measures taken to minimize and mitigate potential impacts are addressed below.

During the initial operations, two full-time staff would maintain the CNG facility, five staff would be employed for facility and loading operations, and approximately ten crew members would operate and maintain the ocean-going carrier. The facility would be anticipated to have a minimum 20 year operational timeframe. Minor increases in staff could occur should facility operations expand at any point during the operational period. Prior to commencing operations, Emera and its contractors would develop and implement site-specific occupational health and safety plans. Emera would operate the facility in accordance with all applicable company, port, local, state, and federal, and company policies and regulations.

The use and storage of hazardous materials and waste at the project area during construction would create risks associated with accidents that could affect the health and safety of workers and other persons in the vicinity. The presence of the CNG facility would constitute an increase in the types and quantities of hazardous materials present at and shipped from the Port of Palm Beach. However, the following best management practices would be utilized to minimize the risk associated with this project:

- Workers would be notified of any potential health hazards associated with hazardous materials at the project area.
- Material safety data sheets would be available on-site for workers to review.
- A site-specific EH&S plan would be developed and would include detailed information on safe work practices, proper health and safety procedures, and emergency procedures.
- Personnel would be trained on site-specific spill prevention and response measures contained in the health and safety plan.
- Workers performing activities that could expose them to hazardous substances would be trained and certified by OSHA.
- Fences and signs would be used at the project site as necessary to control access and to make workers and the public aware of potential hazards. Bollards and jersey barriers would provide an additional level of protection should vehicles or other objects breach the fence.
- The compressor facilities would be designed, constructed, operated, and maintained in accordance with all applicable local, state, and federal standards and regulations (including NFPA) to ensure adequate protection for the public and to prevent accidents and failures at the facility. Safety features to minimize hazards in the event of an emergency would include emergency shutdown procedures, safety equipment, in addition to the EH&S plan.
- Emera would design fire protection systems for the proposed project to limit personal injury, loss of life, loss of property, and facility downtime from fire or explosion. The facility would have adequate numbers of fire prevention and mitigation equipment as required by fire codes and the county and/or state fire marshals.

- The natural gas is being supplied by the local gas utility which includes the facility gas metering station so there is no pipeline component included in Emera's scope of the project in the Port of Palm Beach. However, Emera would coordinate with the Port and the utility for any maintenance or operational activities that would be carried out to and would ensure such activities were scheduled appropriately around the Emera facility operations to minimize risk.
- Emera would ensure that the tank containers are supplied from a manufacturer that meets all design specification and regulatory requirements. These include manufacturer compliance with ISO 11120 and United Nations pressure vessel design requirements as well as the U.S. Department of Transportation required Multiple Element Gas Container (MEGC) Approval. Additionally, all containers would have an International Convention for Safe Containers (CSC) plate as is required by the U.S. Coast Guard.
- Tank containers would be shipped on a deck loaded RO/RO vessel as opposed to below deck which would reduce safety risks in the event of a leak. Emera also would ensure the supplier of the containers have the approval of a ship classification society and the required International Maritime Dangerous Goods Code (IMDG) approval.
- Shipment of CNG tank containers would be conducted in compliance with 49 CFR 173.
- Emera would meet with port officials and local fire and emergency response providers to discuss potential emergencies, determine capabilities, and establish communication protocols and responsibilities. Local authorities would be made familiar with the layout of the facility, the hazards of materials handled on the premises, places where personnel would normally work, and possibly evacuation routes.

The construction and operation of the Emera facility would represent a minimum increase in risk to the nearby businesses and communities. With implementation of these best management practices, regulatory compliance, and standard operating procedures, the potential risk of explosion or exposure to hazardous materials potentially impacting the Port of Palm Beach or the surrounding area would be minimized. Consequently, the presence of hazardous materials on the project site would be anticipated to have only minor impacts associated with implementation of the proposed action.

### **3.6.2.3 *No-Action Alternative***

Under the No-Action Alternative, Emera would not be authorized to export CNG from the Port of Palm Beach and the proposed project would not be constructed. Operations at the port would continue as they are at present and as detailed for the future in the Port of Palm Beach Master Plan. No new short-term or long-term impacts to public and occupational health and safety would be anticipated to occur as a result of implementation of the No-Action Alternative.

## 3.7 ENVIRONMENTAL JUSTICE

### 3.7.1 Affected Environment

Executive Order 12898, “Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations,” directs federal agencies to address environmental and human health conditions in minority and low-income communities. The evaluation of environmental justice is dependent on determining if high and adverse impacts from the proposed project would disproportionately affect minority or low-income populations in the affected community.

Based on the size of the proposed project, the region of interest for the environmental justice analysis was determined to be the area within a one-mile radius of the project site. The U.S. Census Bureau 2010 decennial census data were utilized to determine the minority populations and the American Community Survey 2008 – 2012 census estimates were utilized to determine the low-income populations in the in the affected community. Based on the 2010 census, a total of 8,468 individuals live within one-mile of the project site. A total of 85 percent of this population (7,236 individuals) is minorities (EPA 2010). **Table 3-2** lists the racial and ethnic data for individuals within the one-mile radius, as well as the City of Riviera Beach and Palm Beach County, Florida. The City of Riviera Beach also has a large ethnic minority population of approximately 77 percent, though not as large as in the one mile vicinity of the proposed project site. Palm Beach County has an ethnic minority population of approximately 40 percent (EPA 2010, U.S. Census Bureau 2010).

**Table 3-2. Racial and Ethnic Characteristics (2010 Census)**

	<b>One Mile Radius of Project Site</b>	<b>Percent (%)</b>	<b>City of Riviera Beach</b>	<b>Percent (%)</b>	<b>Palm Beach County</b>	<b>Percent (%)</b>
Total Population	8,468		32,488		1,320,134	
Minority Population	7,236	85.0%	25,048	77.0%	526,563	40.0%
White	1,671	19.7%	8,782	27.0%	970,121	73.5%
African-American	5,949	70.3%	21,401	65.9%	228,690	17.3%
American Indian and Alaska Native	60	0.7%	114	0.4%	6,043	0.5%
Asian	38	0.4%	769	2.4%	31,100	2.4%
Pacific Islander	21	0.2%	25	0.1%	770	0.1%
Other	531	6.3%	638	2.0%	53,138	4.0%
Population Reporting Two or More Races	197	2.3%	759	2.3%	30,272	2.3%
Total Hispanic Population	1,205	14.0%	2,418	7.0%	250,823	19.0%

Source: EPA 2010, U.S. Census Bureau 2010

The majority of the census block groups surrounding the Port of Palm Beach are comprised of populations that are 50 to 100 percent minority (EPA 2010).

The U.S. Census Bureau 2008 to 2012 estimates indicate that approximately 25.4 percent of people in Riviera Beach live below the poverty level as compared to 14.0 percent in Palm Beach County and 15.6 percent in the State of Florida (U.S. Census Bureau 2012). The most current data available for the one-mile radius surrounding the project site is the 2010 census. Over 50 percent of the population in the census tract immediately west of the Port of Palm Beach and the project site of the population lived below the poverty level as of the 2010 Census. Over 35 percent of the population lived below the poverty level in a census tract near the southern edge of the one-mile radius (EPA 2014).

### **3.7.2 Environmental Consequences**

#### **3.7.2.1 *Proposed Project Construction***

Neither racial nor ethnic minority nor low-income persons would be anticipated to experience direct or indirect impacts from construction of the proposed project. No new jobs would be expected to result from the construction activities that could not be accommodated by natural fluctuations of work for currently employed construction workers. Minor indirect beneficial impacts may occur if construction workers were to patronize local businesses operated by racial or ethnic minority or low-income individuals. No construction related impacts to environmental justice communities or individuals would be anticipated with respect to the other resource areas evaluated in this EA.

#### **3.7.2.2 *Proposed Project Operations***

Neither racial nor ethnic minority nor low-income persons would be anticipated to experience adverse direct impacts from operations of the proposed project. Minor beneficial socioeconomic impacts could occur for certain individuals if they are hired for the new jobs associated with operations of the proposed facility. Minor indirect beneficial impacts could also occur if operations staff were to patronize local businesses operated by racial or ethnic minority or low-income individuals. No operations related impacts to environmental justice communities or individuals would be anticipated with respect to the other resource areas evaluated in this EA.

#### **3.7.2.3 *No-Action Alternative***

Under the No-Action Alternative, Emera would not be authorized to export CNG from the Port of Palm Beach and the proposed project would not be constructed. Operations at the port would continue as they are at present and as detailed for the future in the Port of Palm Beach Master Plan. No new short-term or long-term impacts to environmental justice would be anticipated to occur as a result of implementation of the No-Action Alternative.



## **3.8 RESOURCE COMMITMENTS**

### **3.8.1 Irreversible and Irretrievable Commitments of Resources**

The use of land as a resource to support the construction of Emera's proposed CNG facility at the Port of Palm Beach, Florida for the export of CNG would be irretrievable in the long-term. Although the CNG facility could be removed from the site at some future date if decommissioned, the land, until that time, would remain occupied and unavailable for other uses. Some limited unrecyclable construction materials, venting of CNG, energy, and the fuel for facility construction, operations, and maintenance would be irreversible and irretrievable commitments of resources. Emera would also have expended funding on the proposed project that would also be irretrievable.

### **3.8.2 Unavoidable Adverse Impacts**

The project would result in unavoidable, small, adverse impacts associated with construction and operations of the CNG facilities. These impacts would include noise, dust, and vehicle emissions. These small, unavoidable impacts would be offset by beneficial impacts associated with the development of the respective export and import facilities that would lower the cost of electricity in Grand Bahama and therefore stimulate economic growth and increase customer satisfaction in the region. This could also result in reduced emissions from conventional fuel sources on Grand Bahama.

## 4.0 CUMULATIVE IMPACTS

This section provides a discussion of cumulative impacts that could result from implementation of the proposed action or the No-Action Alternative. Cumulative impacts result from the incremental effects the proposed project could have in combination with the impacts of other past, present, and reasonably foreseeable actions. Information presented in this section includes a discussion of current and future projects planned at the Port of Palm Beach. The Port of Palm Beach is an active industrial port site with a variety of upgrades and new projects in process. These projects are independent and unrelated to the CNG facility. This section analyzes the potential for cumulative impacts that could occur as a result of implementation of these projects during the same period in which the CNG facility would be constructed and operated.

In 2011, the Port of Palm Beach issued an update to its Master Plan (CH2M Hill and Martin Associates 2013). In the updated report, it was noted that several areas of the port are not operating at maximum productivity, either because of choices made by tenants or because of the normal aging of port facilities. The port has developed and is implementing specific plans to address these issues including demolition of obsolete buildings, construction of various improvements across the site, and evaluating tenant leases as they expire to maximize potential productivity.

Projects anticipated to occur or already occurring at the Port of Palm Beach in the five to ten years following the publication of the 2011 Master Plan Update are summarized in the following sections. Many of these potential projects require additional environmental evaluation before implementation. Basic information on the projects is presented for evaluation of potential cumulative impacts with respect to the separate Emera proposed action.

### 4.1 CURRENT OR FUTURE PROJECTS FOR THE PORT OF PALM BEACH AREA

The following section describes projects currently active or anticipated to be active during the period in which the Emera CNG facility would be constructed and would operate. These projects are independent of and not associated with the Emera project in any way. These projects are discussed in this section to examine potential cumulative impacts that could be associated from the combined activities associated with both the Emera project and these additional projects. The majority of these are projects occur within the confines of the Port of Palm Beach. **Table 4-1** summarizes these projects.

**Table 4-1. Current or Future Projects in the Port of Palm Beach Area**

<b>EA Section</b>	<b>Project</b>	<b>Description</b>	<b>Cumulative Impacts associated with the Emera Project</b>	<b>Status</b>
4.1.1	Florida Power & Light Overhead Line Relocation	Relocation of existing powerlines	None anticipated	Estimated completion March 2015
4.1.2	Container Yard / Bulk Improvements	Upgrades to infrastructure, buildings, and utilities	None anticipated	Not scheduled at this time
4.1.3	Slip 3 Redevelopment	Lengthening and widening Slip Number 3	Potential minor beneficial cumulative impacts	Estimated completion May 2015
4.1.4	Cargo Expansion – Cargo Lay-Down / Annex Property Development	Development of new property on southwest side of port	None anticipated	Not scheduled at this time
4.1.5	On-Port Intermodal Rail Improvements	Improvements to existing rail tracks within the port property	None anticipated	Not scheduled at this time
4.1.6	Off-Port Intermodal Rail Improvements	Upgrades to rail lines between the FEC Railroad and the Port of Palm Beach	Potential minor beneficial cumulative impacts	Not scheduled at this time
4.1.7	Intermodal Cruise Terminal Transfer Facility	Increased passenger service capacities at Slip Number 1	Potential minor beneficial cumulative impacts	Not scheduled at this time
4.1.8	Dredged material Management Planning and Project Implementation	Project by project management of dredged material and implementation of dredging	None anticipated	Ongoing
4.1.9	Cargo Storage on Florida Power & Light Right-of-Way	Planning and logistics to accommodate Port of Palm Beach associated storage within the existing right-of-way	None anticipated	Ongoing
4.1.10	Harbor and Channel Improvements	A study for the widening and deepening, harbor expansion, and additional lay berths.	Potential minor beneficial cumulative impacts	Feasibility Study complete

<b>EA Section</b>	<b>Project</b>	<b>Description</b>	<b>Cumulative Impacts associated with the Emera Project</b>	<b>Status</b>
4.1.11	Slip Number 2 redevelopment and Enhancement	Increase berth space by lengthening Slip Number 2	Potential minor beneficial cumulative impacts	Not scheduled at this time
4.1.12	Waterside Cargo Terminal Redevelopment	Improvements to infrastructure, buildings, and utilities	Potential minor beneficial cumulative impacts	Not scheduled at this time
4.1.13	Western Cargo Terminal Redevelopment	Improvements to infrastructure, buildings, and utilities	Potential minor beneficial cumulative impacts	Not scheduled at this time
4.1.14	Slip Number 1 Redevelopment	Increase berth space by lengthening or widening Slip Number 1	Potential minor beneficial cumulative impacts	Not scheduled at this time
4.1.15	North Wharf Improvements	Increasing depth and length of the North Wharf and expand upland areas	Potential minor beneficial cumulative impacts	Conceptual Study underway
4.1.16	Florida Power & Light Manatee Center	Construction of a publicly accessible manatee center	None anticipated	Estimated completion November 2015
4.1.17	City of Riviera Beach Community Redevelopment Agency Marina District Redevelopment	Construction of a new event center, redevelopment of Bicentennial Park, and improvements to marina infrastructure	None anticipated	Ongoing

#### **4.1.1 Florida Power and Light Overhead Line Relocation**

A major north-south overhead transmission and distribution powerline for FPL is located in the western portion of the port. Because of overhead clearance and safety issues, the powerline bank is a potential overhead obstruction and constraint at the port's South Cargo Yard. There are restrictions on what can be stored beneath and adjacent to this powerline. Additionally, the presence of the powerline inhibits the Port's ability to use the cargo space to its maximum potential. Plans include relocation of the powerlines by either placing them

underground or elevating them in their current position (CH2M Hill and Martin Associates 2013). No significant environmental impacts would be anticipated to be associated with implementation of this project. No cumulative impacts would be anticipated in conjunction with the Emera project.

#### **4.1.2 Container Yard / Bulk Improvements**

Aging infrastructure and changing tenant land uses will require improvements and modifications in the container yard. Upgrades to the pavement infrastructure, circulation areas, utilities, stormwater systems and security may be required. Upgrades could also include demolition of obsolete facilities and equipment (CH2M Hill and Martin Associates 2013).

No significant impacts to environmental resources are expected. It is anticipated that beneficial impacts would be associated with improvements to the quality of stormwater discharges as a result of the planned upgrades. Additional cargo will generate more truck and train trips and is likely to have some incremental impact on roadways of the surrounding communities. Potential socioeconomic impacts may result from the attraction of new tenants to the site resulting in increased productivity, potential increases in jobs, and improved lease agreements. No cumulative impacts would be anticipated in conjunction with the Emera project.

#### **4.1.3 Slip 3 Redevelopment**

The Slip Number 3 berthing areas require upgrading, and upland areas surrounding the berths require improvements. After evaluating several options, the Port of Palm Beach determined that lengthening and widening the slip and demolishing structures adjacent to the current berthing area would maximize berthing, increase efficiency of operations, and increase the usefulness of the slip. Depending on the final configuration of the redevelopment project, additional usable land could be created or more berthing area could result, both of which are needed at the port (CH2M Hill and Martin Associates 2013).

Construction of this project will occur predominantly (if not entirely) in the existing deep water basin and slip. Therefore, environmental impacts are expected to be relatively minor except in the South Marginal Area. In the South Marginal Area dredging and channel shifting operations may require more complex permitting efforts (CH2M Hill and Martin Associates 2013). The Port recently obtained environment permits from the Palm Beach County Health Department, the City of Riviera Beach, FEDP, and the USACE for this project. The project is not anticipated to generate additional impacts to existing infrastructure. The Slip 3 redevelopment in combination with the proposed Emera project would have minor beneficial impacts. The Emera project would utilize Slip 3 contributing to a minor cumulative beneficial impact to socioeconomics in the area. The Slip 3 redevelopment project is expected to be completed by spring 2015.

#### **4.1.4 Cargo Expansion – Cargo Lay-Down / Annex Property Development**

The Port has acquired an area near the southwest corner of the property with plans to develop it into a cargo lay-down area with north-south connectivity through the FPL right-of-way for vehicles to the port's main property. Construction of this cargo lay-down in the annexed property would improve the capacity for cargo operations at the port and provide overflow area for increased cargo throughput (CH2M Hill and Martin Associates 2013).

Impacts to infrastructure and environmental resources are expected to the extent that "pervious" areas would be converted to "impervious" as a result of paving of the site. New water, sewer, and electrical services would also be constructed. These elements would be installed in accordance with regulations of local jurisdiction to meet or exceed the requirements for water quality and stormwater management. The additional cargo would generate more truck and train trips and is likely to have some incremental impact on the local roadways. The project would increase cargo capacity at the Port. No cumulative impacts would be anticipated in conjunction with the Emera project.

#### **4.1.5 On-Port Intermodal Rail Improvements**

Existing rail lines entering the port create constraints on transfer and unloading areas thus limiting operations and creating occasional obstructions to vehicles both within the port and in Riviera Beach. Improvements to the existing rail tracks west of U.S. 1 would allow improved intermodal transfer and allow the area near the waterfront to be converted to cargo staging as cargo growth demands additional area. The Port of Palm Beach rail improvements project is expected to include the reconfiguration of existing rail lines, construction of new rail lines, and construction of new staging areas to support existing and anticipated port rail cargo operations (CH2M Hill and Martin Associates 2013). None of these rail projects would be associated with the Emera CNG facility.

No adverse environmental or infrastructure impacts are anticipated as a result of the on-port intermodal rail improvements. It is expected that the rail improvements project would result in improvements to stormwater discharge because of new and upgraded facilities. No cumulative impacts would be anticipated in conjunction with the Emera project.

#### **4.1.6 Off-Port Intermodal Rail Improvements**

Port customers rely heavily on rail service to move their goods in addition to ocean shipping operations. The current rail facilities connecting the Port of Palm Beach to the FEC Railroad are proposed for upgrades to accommodate improved rail efficiency and to effectively manage the increases in intermodal port cargo. Rail service to the port would benefit significantly from development of a second parallel interchange track within the existing FEC rail right-of-way. A recent study indicated that shifting the existing interchange tracks south of 13th Street and adjacent to the west side of the port could reduce the numbers of rail crossing blockages in Riviera Beach caused by trains serving the port. Additionally, the gradual development of

an intermodal transfer yard on the west side of the port in conjunction with new interchange tracks paralleling existing tracks would improve the efficiency of intermodal moves and free up internal port property for cargo operations (CH2M Hill and Martin Associates 2013). None of these rail projects would be associated with the Emera CNG facility.

These rail improvements would significantly enhance rail transportation and public access with no additional impacts to sewer, solid waste disposal, drainage or potable water supplies. No environmental resource impacts are anticipated. Potential minor beneficial cumulative impacts to socioeconomics would be anticipated in conjunction with the Emera project as a result of the projected increases in port operations.

#### **4.1.7 Intermodal Cruise Terminal Transfer Facility**

Future improvements are planned to increase passenger service capacities at the Port of Palm Beach through the construction of a Cruise Terminal on the north side of Slip 1, west of the existing cruise terminal; extension of Slip 1 to the west; and construction of additional parking (CH2M Hill and Martin Associates 2013).

The project is expected to result in increased passenger capacity for both cruise and ferry vessels. Positive economic benefits associated with new passenger activity would increase proportionately. Additional vehicle trips would be generated by the project which must be assessed at the time of project design (CH2M Hill and Martin Associates 2013). Most if not all impacts to environmental resources would be expected to occur in previously dredged areas. A natural resource inventory, analysis, and requisite environmental permits would need to be obtained prior to construction. Potential minor beneficial cumulative impacts to socioeconomics would be anticipated in conjunction with the Emera project as a result of the projected increases in port operations.

#### **4.1.8 Dredged Material Management Planning and Project Implementation**

Dredged material management at the Port of Palm Beach occurs on a project by project basis, generally directed by the USACE as it relates to maintenance of the federal Harbor project. An existing Tri-Party Agreement between the Port, Palm Beach County, and the Town of Palm Beach lays the groundwork for collaborative efforts to assist the USACE in developing and maintaining an array of spoil disposal and sand management options (CH2M Hill and Martin Associates 2013).

Improved sand transfer and dredged material management is expected to have significant socioeconomic, fiscal, and environmental benefits including reduced maintenance dredging frequency, more reliable supply of beach compatible sand to eroding beaches in the Town of Palm Beach, and better operation of the port on a regular and post-emergency basis. Better Port operation and improved coastal protection provided by healthier beaches would have significant and long lasting value to the adjacent areas new the port as well as to the entire county (CH2M Hill and Martin Associates 2013).

The Dredged Material Management project could have environmental impacts to barren bottom areas near the jetties. Additionally, placement of sand must consider near and off-shore reef habitats (CH2M Hill and Martin Associates 2013). Impacts are not expected to be significant. However, each project would be evaluated and impacts would need to be avoided and minimized. Mitigation, if necessary, would need to be developed and implemented. The federal permitting process of environmental assessment under NEPA, as well as coordination with the State of Florida, would be conducted as required for each aspect of the management plan. The Emera project would not increase or decrease the need for dredged material management at the Port of Palm Beach, therefore, there would be no cumulative impacts anticipated as a result of the Emera project occurring in conjunction with the dredged material management project.

#### **4.1.9 Cargo Storage on Florida Power and Light Right-of-Way**

Cargo storage areas are limited at the Port of Palm Beach. This limitation is expected to impact capacity in the next ten years. An existing FPL overhead power transmission line right-of-way along the south side of the port's South Gate Area is approximately 240 feet wide and 1,200 feet long. There are also underground oil and natural gas lines within this right-of-way. The Port of Palm Beach and FPL have been in discussions regarding use of the open areas within the right-of-way for ground storage of bulk, breakbulk, chassis mounted containers or vehicles. With proper planning, overhead clearance restrictions, and access arrangements such an agreement could be possible. The areas for cargo placement would require varying degrees of improvement to accommodate cargo operations. Improvements would vary from stone stabilization to heavy asphalt pavement with storm drainage improvements, lighting, and security fencing.

Approximately 8-10 acres of usable cargo lay-down area could be developed under this plan. In addition, to allow connectivity of the main port property to the annex property discussed previously, access drives/roads would also be required through this right-of-way (CH2M Hill and Martin Associates 2013).

The project would increase cargo capacity at the port. No significant impacts to infrastructure or environmental resources are expected. Additional cargo would generate more truck and train trips and would likely have some incremental impact on roadways. No cumulative impacts would be anticipated in conjunction with the Emera project.

#### **4.1.10 Harbor and Channel Improvements**

There are currently constraints on the size and width of vessels expected to enter the channel at the Port of Palm Beach. Additionally, the current berthing capacity at the Port is limited. At the same time, vessel sizes for both cargo and cruise are increasing in length and beam. These changes, combined with the existing constraints at the port have the potential to significantly impact future growth. The Harbor and Channel Improvements project would include a study



of channel widening and deepening, harbor expansion, and additional lay berths at the port and along the channel perimeter (CH2M Hill and Martin Associates 2013).

The project would be anticipated to have a significant, beneficial impact on port business, allowing the port to accept larger (industry standard) ships which cannot currently access the port. Additionally, this project would further enable the port to attract and maintain customers. However, harbor expansion could also have a significant impact on natural resources. Resource impacts requiring mitigation could include loss of seagrasses, loss of hard bottom and benthic habitat, temporary water quality degradation due to construction activities, and fisheries habitat impact. Any expansion of the dredged area to the south would require special focus on impacts to the existing warm water discharges from FPL that attract manatees (CH2M Hill and Martin Associates 2013).

The USACE is the lead agency on the harbor expansion study and it is currently underway. The Draft Final Integrated Feasibility Report and Environmental Impact Statement indicates that widening by the proposed footprint and deepening to a project depth of 39 feet Mean Lower Low Water (MLLW) in the inner harbor and 41 feet MLLW in the entrance channel, with recommended advanced maintenance features, be authorized by Congress for implementation. The comment period on this report ended March 10, 2014. Comments were anticipated to be analyzed and the report amended as necessary within 30 days (CH2M Hill and Martin Associates 2013). Should this information become available in the future it will be included in the final EA.

The Port would be able to accommodate the Emera project whether or not the Harbor and Channel Improvements project was completed. Therefore, no cumulative adverse impacts would be anticipated in conjunction with the Emera project. Potential minor beneficial cumulative impacts to socioeconomics would be anticipated in conjunction with the Emera project as a result of the projected increases in port operations.

#### **4.1.11 Slip Number 2 Redevelopment and Enhancement**

As discussed previously, lack of adequate berthing areas and anticipated increases in ship lengths/depths at the port contribute to cargo/bulk capacity limits. The port may increase berth space in Slip Number 2 by lengthening the slip to the west or widening it to the north or south. Such changes would allow the berthing of longer and/or wider ships, or additional smaller ships (CH2M Hill and Martin Associates 2013).

Increasing the berthing capacity at the Port of Palm Beach is expected to have a positive impact on existing and future port operations. No natural resources would be impacted in the upland areas. Construction will occur predominantly (if not entirely) in the deep water basin and slip, therefore environmental impacts are anticipated to be minor. All appropriate permits would be obtained and processes followed once project plans are complete and dredge and fill impacts have been specifically identified (CH2M Hill and Martin Associates 2013). Potential

minor beneficial cumulative impacts to socioeconomics would be anticipated in conjunction with the Emera project as a result of the projected increases in port operations.

#### **4.1.12 Waterside Cargo Terminal Redevelopment**

Areas of the Port of Palm Beach require modification and modernization for land use, equipment, and circulation flow. This Waterside Cargo Terminal Redevelopment project is expected to include improvements to roads, pavement, utilities, stormwater systems, security, lighting, cargo and boat storage facilities, and demolition of obsolete structures (CH2M Hill and Martin Associates 2013).

Completion of this project would increase revenue opportunities for the port, provide more diverse and flexible land use for cargo tenants, and increase the port's overall general cargo land area. Impacts to infrastructure and environmental resources are anticipated in association with changing pervious areas to impervious through paving the site. New water, sewer, and electrical services would need to be constructed in accordance with the regulations of local jurisdictions to meet or exceed the water quality and stormwater requirements. The additional cargo capacity would generate more truck and train trips and would likely have some incremental impact on the roadways (CH2M Hill and Martin Associates 2013). Potential minor beneficial cumulative impacts to socioeconomics would be anticipated in conjunction with the Emera project as a result of the projected increases in port operations.

#### **4.1.13 Western Cargo Terminal Redevelopment**

Another area of the Port of Palm Beach requiring modification and modernization for land use, equipment, and circulation flow is the Western Cargo Terminal (CH2M Hill and Martin Associates 2013). This project is expected to include the same elements and have the same impacts as described in **Section 4.1.12**. Potential minor beneficial cumulative impacts to socioeconomics would be anticipated in conjunction with the Emera project as a result of the projected increases in port operations.

#### **4.1.14 Slip Number 1 Redevelopment**

To accommodate larger cruise and cargo vessels, widening of Slip Number 1 at the Port of Palm Beach may be necessary. To gain berth space, the port could lengthen the slip to the east (at North Wharf) or widen the slip on the south side. This would allow for berthing of longer and/or wider ships and allow smaller ships in the slip safer maneuvering room (CH2M Hill and Martin Associates 2013).

By increasing berthing capacity, this project is expected to have a positive impact on existing and future port operations. The existing uplands are developed therefore no impacts to natural resources would be anticipated. Potential water quality impacts would need to be considered during construction. Construction would occur predominantly (if not entirely) in the deep water basin and slip, therefore environmental impacts are expected to be relatively minor.

Appropriate permitting processes would need to be followed once dredge and fill impacts have been specifically identified (CH2M Hill and Martin Associates 2013). Potential minor beneficial cumulative impacts to socioeconomics would be anticipated in conjunction with the Emera project as a result of the projected increases in port operations.

#### **4.1.15 North Wharf Improvements**

The North Wharf, like other areas of the Port of Palm Beach, is in need of modernization and improvement. The depth and length of the berth is limiting for all except small cargo and cruise ships and yachts. As ferry services evolve and the cargo business grows, additional larger ferry, cruise, and cargo berths may be needed. To accommodate this need, the depth and length of the North Wharf would need to be increased. Additionally, upland areas would need to be modified and expanded to allow for adequate operational and lay-down areas (CH2M Hill and Martin Associates 2013).

This project would increase berthing capacity at the Port of Palm Beach and is expected to have a positive impact on existing and future port operations. The extension and realignment of berthing areas would impact submerged areas. However, most if not all impacts are expected to be on previously dredged areas. Nevertheless, a natural resource inventory, analysis, and appropriate permitting would be required. The addition of cargo would generate more truck and train trips and would likely have some incremental impact on the roadways. Additional vehicle trips would be generated by the project through possible expanded passenger counts which is also likely to have some incremental impact on the roadways (CH2M Hill and Martin Associates 2013). Potential minor beneficial cumulative impacts to socioeconomics would be anticipated in conjunction with the Emera project as a result of the projected increases in port operations.

#### **4.1.16 Florida Power and Light Manatee Center**

In 2014, FPL began construction of a manatee education center at its Next Generation Clean Energy Center, a combined-cycle natural gas plant adjacent to the Port of Palm Beach. The manatee education center will be a “Key West-style” center located on the eastern side of the plant adjacent to the Intracoastal Waterway. The manatee center would include educational exhibits on the manatees and Florida’s environment, a boardwalk, classrooms, and a manatee viewing area. The center is scheduled to open in November 2015. This project is likely to have a beneficial impact in terms of public education and outreach, socioeconomics with respect to jobs, and potentially indirectly for the manatee with respect to the center’s missions which will encourage manatee research and protection (Florida Power and Light 2014). No cumulative impacts would be anticipated as a result of this project in conjunction with the Emera proposed action.

#### **4.1.17 City of Riviera Beach Community Redevelopment Agency Marina District Redevelopment**

The City of Riviera Beach is in the process of redeveloping the Marina District north of the Port of Palm Beach. Redevelopment activities began in April 2014 and are broken up into several phases. Current plans include:

- construction of a new Riviera Beach event center with meeting rooms, a restaurant, café, and rooftop terrace
- Redevelopment of Bicentennial Park including a covered area for a portable stage, a fountain, and concessions
- Improvements to marina infrastructure (PalmBeachPost.com 2014)

No cumulative impacts would be anticipated as a result of this project in conjunction with the Emera proposed action.

#### **4.2 CUMULATIVE IMPACTS ASSOCIATED WITH THE PROPOSED ACTION**

Significant cumulative impacts would not be anticipated should any of these projects be implemented at the same time as the Emera's proposed action. No significant impacts are anticipated as a result of the proposed project for any resource area. The Emera project site is currently paved; therefore no impacts to natural resources would be anticipated. Minor adverse impacts could occur to some resource areas, such as air quality, during construction; however these would be temporary and would be minimized through use of best management practices during construction. Minor adverse impacts during operations would also be minimized through use of best management practices. Minor beneficial impacts to socioeconomics and environmental justice could result from implementation of the Emera proposed action. The proposed project is smaller and the construction period is also likely of shorter duration than for the majority of the projects discussed above. No significant cumulative impacts to any resource areas would be anticipated as a result of implementation of any of these projects in addition to the proposed project. Potential minor, cumulative, beneficial socioeconomic and/or environmental justice impacts could result from this project through stimulation of additional construction and operations jobs at the Port of Palm Beach and through additional patronage of local and surrounding businesses.

## 5.0 CONCLUSIONS

DOE has prepared this final EA to evaluate the potential environmental impacts that would occur as a result of the construction and operation of a CNG facility. DOE's proposed action is to grant the portion of Emera's Application requesting authority to export natural gas as CNG in an amount up to 8 MMscfd (2.92 Bscf/yr) to non-FTA countries in the initial phase of the project evaluated in this EA. CNG exports would occur from Emera's proposed facility at the Port of Palm Beach, Florida, via trailers, tank containers, and ocean-going carriers to any non-FTA country not prohibited by U.S. law or policy. Emera has stated that it intends to initially export CNG to a facility at Freeport Harbour, Grand Bahama Island (the initial phase). Expansion of the facility to export CNG in an amount up to 25 MMscfd to other potential markets in future phases may occur at a later time and would require a separate environmental review, as appropriate.

DOE evaluated 16 resource areas for potential impacts associated with the proposed project. After preliminary evaluation, it was determined that impacts would be negligible or non-existent for nine resource areas: aesthetics and visual resources; land use; community services; cultural resources; geology, topography, and soils; terrestrial resources; noise and vibration; transportation; and utilities. Therefore, these nine resource areas were not evaluated in detail in the EA. The EA discusses the results of the analysis of seven resource areas: water resources, aquatic resources, air quality, solid and hazardous waste, socioeconomics, environmental justice, and public and occupational health and safety. For all seven of these resource areas, it was determined that there would be negligible impacts or that potential impacts would be minor, temporary, or both. In addition, no other current or planned projects in the vicinity of the Port were identified as having potential cumulative impacts in conjunction with the proposed action. DOE's authorization would be for the exportation of CNG from the Port of Palm Beach. The Emera Project was included in the scope of DOE's NEPA review as a connected action.

If DOE does not authorize the export of CNG from the Port of Palm Beach, Emera would not construct the proposed facility or export gas from the Port of Palm Beach under the No-Action Alternative. Therefore, there would be no impacts to any resource under the No-Action Alternative.

## 6.0 REFERENCES

Atlantic Intracoastal Florida Inland Navigation District. 2011. Palm Beach County Boating Safety and Manatee Protection Zones. Available at: [http://www.co.palm-beach.fl.us/erm/coastal/manatees/pdf/201104\\_FIND\\_PBCManateeAndSafetyZoneBrochure.pdf](http://www.co.palm-beach.fl.us/erm/coastal/manatees/pdf/201104_FIND_PBCManateeAndSafetyZoneBrochure.pdf). Accessed October 27, 2014.

Catanese Center for Urban and Environmental Solutions at Florida Atlantic University and Ecological Associates, Inc. 2007. Palm Beach County Manatee Protection Plan. Prepared for Palm Beach County Department of Environmental Resources Management. July. Available at: <http://www.pbcgov.com/erm/coastal/manatees/pdf/FINALPBCMPP.pdf>. Accessed January 15, 2014.

CH2M Hill and Martin Associates. 2013. Final Port of Palm Beach Master Plan Update 2012-2022, as adopted August 23, 2012 and as amended March 28, 2013 by the Port of Palm Beach Commission. Available online at: <http://www.portofpalmbeach.com/DocumentCenter/View/102>. Accessed September 22, 2013.

Federal Emergency Management Agency. 1982. FIRM Flood Insurance Rate Map City of Riviera Beach, Florida Palm Beach County, Panel 3 of 3, Community-Panel Number 125142 0003 D. September. Available at: <http://map1.msc.fema.gov/idms/IntraView.cgi?KEY=93281998&IFIT=1>. Accessed January 15, 2014.

Federal Emergency Management Agency. 2014. FIRM Flood Insurance Rate Map Palm Beach County, Florida and Incorporated Areas, panel 393 of 1200, Map Number 12099C0393F. Revised Preliminary, August 18. Available at: <https://msc.fema.gov/portal/availabilitySearch?addcommunity=120220&communityName=PALM%20BEACH,TWN%20/%20PALM%20BEACH%20CO#searchresultsanchor>. Accessed April 16, 2015.

Florida Power and Light (FPL). 2014. Riviera Beach Next Generation Clean Energy Center. Available online at: <http://www.fpl.com/environment/plant/riviera.shtml>. Accessed October 27, 2014.

Intergovernmental Panel on Climate Change (IPCC). Climate Change 2013 The Physical Science Basis. Working Group I Contribution to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change. Available at: [http://www.ipcc.ch/report/ar5/wg1/#.UvqZw\\_PnbDc](http://www.ipcc.ch/report/ar5/wg1/#.UvqZw_PnbDc). Accessed February 11, 2014.

Lake Worth Lagoon Initiative. 2013. Lake Worth Lagoon Management Plan. Available at: <http://www.pbcgov.org/erm/lwli/pdfs/2013ManagementPlan/2013LWLmanagementplanFINAL.pdf>. Accessed January 14, 2014.

Lake Worth Lagoon Initiative. 2014. The Lake Worth Lagoon. Available at: [http://www.pbcgov.org/erm/lwli/lw\\_lagoon.asp](http://www.pbcgov.org/erm/lwli/lw_lagoon.asp). Accessed January 14, 2014.

PalmBeachCoast.com. 2014. Ground-breaking today on Riviera Beach marina redevelopment. Available at: <http://www.palmbeachpost.com/news/business/ground-breaking-today-on-riviera-beach-marina-rede/nfXKY/>. Accessed April 23, 2014.

Palm Beach County. 2011. Comprehensive Emergency Management Plan. Available at: [http://www.pbcgov.com/dem/publications/pdf/CEMP\\_2011.pdf](http://www.pbcgov.com/dem/publications/pdf/CEMP_2011.pdf). Accessed February 13, 2014.

Palm Beach County. 2013. Intracoastal Waterway. Available at: <http://www.pbcgov.com/erm/coastal/ICWDredgingCoordination.htm>. Accessed January 14, 2014.

Palm Beach County Water Utilities. 2012. Annual Water Quality Report, Water delivered during 2012. Available at: <http://www.pbcgov.com/waterutilities/CCR2012.pdf>. Accessed January 10, 2014.

PBS&J, SeaGrant Florida, and Jay Gorzelany. 2009. Palm Beach County Vessel Traffic Study. Prepared for Florida Fish and Wildlife Conservation Commission Division of Law Enforcement, Boating, and Waterways Section. Available at: <http://www.lwli.org/pdfs/2013ManagementPlan/2009PalmBeachVesselTrafficStudy.pdf>. Accessed October 27, 2014.

Sortal, Nick. 2014. Island Breeze casino cruise ship gets flowing. SouthFlorida.com. Available at: <http://www.southflorida.com/gambling/fl-island-breeze-cruise-20140404,0,6452413.story>. Accessed on October 29, 2014.

The Islands of the Bahamas. 2014. Grand Bahama Island – Port of Call. Available at: <http://www.bahamas.com/grand-bahama-port-of-call>. Accessed February 12, 2014.

U.S. Army Corps of Engineers (USACE). 2014. Final Integrated Feasibility Report and Environmental Impact Statement, Lake Worth Inlet, Palm Beach Harbor, Palm Beach County, Florida. Available online at: <http://www.portofpalmbeach.com/DocumentCenter/Home/View/622>. Accessed February 2, 2015.

U.S. Census Bureau. 2010. Profile of General Population and Housing Characteristics: 2010; 2010 Demographic Profile Data (DP-1) for Palm Beach County and the City of Riviera Beach, Florida. American Fact Finder. Available online at: [http://factfinder2.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=DEC\\_10\\_SF1\\_QTP3](http://factfinder2.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=DEC_10_SF1_QTP3) and [http://factfinder2.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=DEC\\_10\\_DP\\_DPDP1](http://factfinder2.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=DEC_10_DP_DPDP1). Accessed February 12, 2014.

U.S. Census Bureau. 2012. Selected Economic Characteristics 2008-2012 American Community Survey 5-Year Estimates (DP03) for Palm Beach County and the City of Riviera Beach, Florida. American Fact Finder. Available online at: <http://factfinder2.census.gov/faces/nav/jsf/pages/index.xhtml>. Accessed February 12, 2014.

U.S. Census Bureau. 2013. 2010 Demographic Profile for Palm Beach County and the City of Riviera Beach, Florida. 2010 Population Finder. Available online at: <http://www.census.gov/popfinder/?s=12>. Accessed February 12, 2014.

U.S. Census Bureau. 2014. State and County QuickFacts for Palm Beach County and the City of Riviera Beach, Florida. Available online at <http://quickfacts.census.gov/qfd/states/12/12099.html> and <http://quickfacts.census.gov/qfd/states/12/1260975.html>. Accessed February 12, 2014.

U.S. Environmental Protection Agency (EPA). 2010. EJView Census 2010 Summary Report. Available online at: <http://epamap14.epa.gov/ejmap/entry.html>. Accessed February 12, 2014.

U.S. Environmental Protection Agency (EPA). 2012. National Ambient Air Quality Standards (NAAQS). Available online at: <http://www.epa.gov/air/criteria.html>. Accessed February 11, 2014.

U.S. Environmental Protection Agency (EPA). 2013a. Currently Designated Nonattainment Areas for All Criteria Pollutants. Green Book. December 5. Available online at: <http://www.epa.gov/oaqps001/greenbk/ancl.html>. Accessed February 11, 2014.

U.S. Environmental Protection Agency (EPA). 2013b. Overview of Greenhouse Gases. Available online at: <http://www.epa.gov/climatechange/ghgemissions/gases.html>. Accessed February 11, 2014.

U. S. Fish and Wildlife Service. 2012. National Wetlands Inventory website. U.S. Department of the Interior, Fish and Wildlife Service, Washington, D.C. Available at: <http://www.fws.gov/wetlands/>. Accessed January 15, 2014.

U.S. Geological Survey. 1990. Groundwater Atlas of the United States – Alabama, Florida, Georgia, and South Carolina. HA 730-G. Available at: [http://pubs.usgs.gov/ha/ha730/ch\\_g/index.html](http://pubs.usgs.gov/ha/ha730/ch_g/index.html). Accessed January 10, 2014.



# *Figures*

## **APPENDIX A**

### **Distribution List**

## **AGENCY LIST**

ATTN: Ms. Jarra Kaczwarra  
Port of Palm Beach  
One East 11th Street, Suite 600  
Riviera Beach, Florida 33404

ATTN: Ms. Lauren P. Milligan, Env., Mgr.  
Florida State Clearinghouse  
Florida Dept. of Environmental Protection  
3900 Commonwealth Boulevard, MS-47  
Tallahassee, FL 32399-3000  
T: 850.245.2170  
Email Address: [lauren.milligan@dep.state.fl.us](mailto:lauren.milligan@dep.state.fl.us)

ATTN: Mr. Robert F. Bendus, Director, and State Historic Preservation Officer  
Bureau of Historic Preservation  
R.A. Gray Building  
500 South Bronough Street  
Tallahassee, FL 32399-0250  
T: 850.245.6333

ATTN: Ms. Heather Blough, Acting SERO NEPA  
Coordinator NOAA Fisheries Service, Southeast  
Regional Office  
263 13th Avenue South  
St. Petersburg, FL 33701  
T: 727.551.5706  
Email Address: [Heather.Blough@noaa.gov](mailto:Heather.Blough@noaa.gov)

ATTN: Mr. Miles Croom, Asst. Regional Administrator  
NOAA, National Marine Fisheries Service  
Southeast Regional Office, Habitat Conservation  
263 13th Avenue South  
St. Petersburg, Florida 33701  
Email Address: [Miles.Croom@noaa.gov](mailto:Miles.Croom@noaa.gov)

ATTN: Ms. Susan Kaynor  
Chief, Palm Beach Gardens Section  
U.S. Army Corps of Engineers  
Regulatory Division, Jacksonville District  
4400 PGA Boulevard, Suite 500  
Palm Beach Gardens, Florida 33410  
Port of Palm Beach Corps Permit # SAJ-1991-30682 (IP-LCK)

ATTN: Ms. Dana Hartley  
U.S. Fish & Wildlife Service  
South Florida Ecological Services Field Office  
1339 20<sup>th</sup> Street  
Vero Beach, FL 32960-3559  
T: 772.469.4236

ATTN: Mr. Christopher Militscher  
U.S. Environmental Protection Agency, Region 4  
Sam Nunn Atlanta Federal Center  
61 Forsyth Street, SW  
Atlanta, GA 30303  
T: 404-562-9512  
Email Address: [Militscher.Chris@epa.gov](mailto:Militscher.Chris@epa.gov)

ATTN: Dr. William R. Straw  
Regional Environmental Officer  
DHS/FEMA Region IV-Hollins Building  
3003 Chamblee Tucker Road  
Atlanta, GA 30341-4112

ATTN: John T. Gatti, Commander  
United States Coast Guard Station, Lake Worth Inlet  
3300 Lake Shore Drive  
Riviera Beach, FL 33404

ATTN: Mr. Jeff C. Wright  
Director, Office of Energy Projects  
Federal Energy Regulatory Commission  
888 First Street, NE, Room 6A-01, PJ-1  
Washington, DC 20426

ATTN: Mr. Richard Corley  
Maritime Administration  
Department of Transportation  
1200 New Jersey Avenue, SE  
Washington, DC 20590-0001

## **PUBLIC LIBRARY**

ATTN: Librarian  
Riviera Beach Public Library  
600 West Blue Heron Blvd.  
Riviera Beach, Florida 33404  
T: 561.845.4195

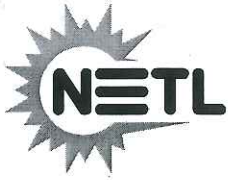
## **TRIBAL LIST**

ATTN: Mr. James E. Billie, Chairman  
Seminole Tribe of Florida  
6300 Stirling Road  
Hollywood, FL 33024  
T: 954.963.6300  
[jamesbillie@semtribe.com](mailto:jamesbillie@semtribe.com)

ATTN: Mr. Leonard M. Harjo, Principal Chief  
The Seminole Nation of Oklahoma  
P.O. Box 1498  
Wewoka, OK 74884  
T: 405.257.7200  
[principalchief@seminolnation.com](mailto:principalchief@seminolnation.com)

## **APPENDIX B**

### **Correspondence and Agency Consultation**



October 15, 2014

Ms. Dana Hartley  
U.S. Fish & Wildlife Service  
South Florida Ecological Services Field Office  
1339 20th Street  
Vero Beach, FL 32960-3559

**SUBJECT: Environmental Assessment for the Emera CNG, LLC, Compressed Natural Gas Project, Port of Palm Beach, Florida (DOE/EA-1976)**

The U.S. Department of Energy's (DOE) National Energy Technology Laboratory (NETL) has determined, following a review conducted in accordance with the DOE's National Environmental Policy Act (NEPA) Implementing Procedures, that preparation of an Environmental Assessment (EA) is the appropriate level of environmental review for the Emera CNG, LLC Compressed Natural Gas Project, located in Port of Palm Beach, Florida

DOE's proposed action and subject of the EA is to grant authorization under Section 3 of the National Gas Act (NGA), 15 U.S.C. § 717b and Part 590 of the regulations of the Department of Energy (DOE), 10 C.F.R. § 590 in response to Emera's application. Emera's proposed project is to export up to 9.125 billion cubic feet (Bcf) per annum (0.025 Bcf per day) of gaseous compressed natural gas (CNG). DOE is not providing funding or financial assistance to Emera.

Emera is seeking authorization to export CNG via truck and ocean going carrier from the State of Florida to Grand Bahama, or any other country not prohibited by United States trade law or policy.

Emera would construct a CNG compression facility within the Port of Palm Beach, off the Riviera Lateral, near an existing intrastate pipeline. The facility will consist of dehydration, compression and filling equipment with a nominal loading capacity of 0.025 Bcf per day. Pressure vessels would be loaded with CNG into tank containers. Each container would be comprised of multiple fixed tanks (either 8 or 12 tanks) within a steel frame 40' long by 8' wide by 6.75' high. These containers meet the International Organization of Standardization (ISO) for shipping. The combined tankage per shipping container will be filled with natural gas to 3600 psig. The total amount of gas per tank container would be approximately 500,000 standard cubic feet. In the initial phase there would be 13 to 16 filling posts for simultaneous filling of tank containers. Once filled with CNG, the tank containers would be hauled by truck onto a roll on/roll off ocean-going carrier vessel located approximately 2,500 feet away at its mooring point. Haul trucks would stay within the developed Port of Palm Beach facility. It is anticipated that one ocean-going carrier would leave the port each day.

Phase I; During the initial phase the facility would compress and load approximately 8 inflow and outflow roll trailers per day, while Phase II will be at full infrastructure build-out where it is anticipated that up to 16 trailers would enter and exit the facility each day.

In accordance with DOE NEPA implementing procedures, DOE must evaluate the potential environmental impacts of its proposed action that could have a significant impact on human health and the environment, including decisions on whether to provide authorization. In compliance with these regulations and DOE's procedures, the EA will examine the potential environmental impacts of the proposed action and the No-Action Alternative and will identify any unavoidable adverse environmental impacts of the proposed action. This EA (*when final*) will fulfill DOE's obligations under NEPA and provide DOE with the information needed to make an informed decision to authorize Emera's proposed project.

DOE considers this informal consultation as a request for any information you may have on species or habitat of biological significance within the vicinity of the Emera project or any comments or concerns you have on the potential for this project to affect these habitats and/or species. This information is being requested to aid in the preparation of the EA and to meet DOE's obligations under Section (7)(a)(2) of the Endangered Species Act of 1973 *as amended*. DOE has identified the West Indian Manatee (*Trichechus manatus*, including two subspecies) to occur within the project area. The Emera Project will not involve any construction below ordinary high water, and modifications to the docking area have already been properly permitted and constructed by the Port of Palm Beach. For this reason, at this time, DOE has made a preliminary determination that the Emera Project is not likely to adversely affect this species or its habitat.

DOE's NETL is currently preparing the Draft EA for this project and estimates it will be made available for public comment in Mid-November 2014 with a 30-day public comment period. At this time, DOE does not anticipate holding a public hearing on the Draft EA. However, DOE will consider requests for a hearing if such request is submitted during the comment period. The EA will be available on NETL's NEPA website. A hard copy of the Draft EA will also be sent to your office, where you may again respond to any specific comments or concerns you may have with the project. If you have any such information, or wish to offer any questions or comments about the Emera project, please contact DOE's NETL using the contact information provided below:

ATTN: Fred Pozzuto  
U.S. Department of Energy  
National Energy Technology Laboratory  
3610 Collins Ferry Road  
P.O. Box 880  
Morgantown, WV 26507  
Office phone: 304-285-5219  
Email: [fred.pozzuto@netl.doe.gov](mailto:fred.pozzuto@netl.doe.gov)

Sincerely,



Fred E. Pozzuto  
Environmental Manager / NEPA Compliance Officer

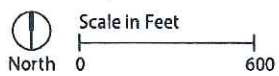
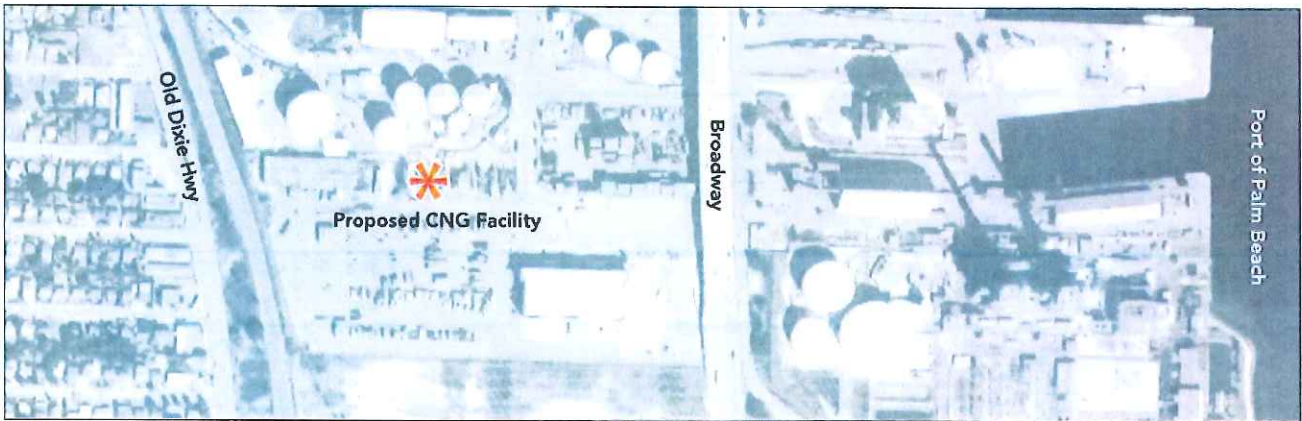
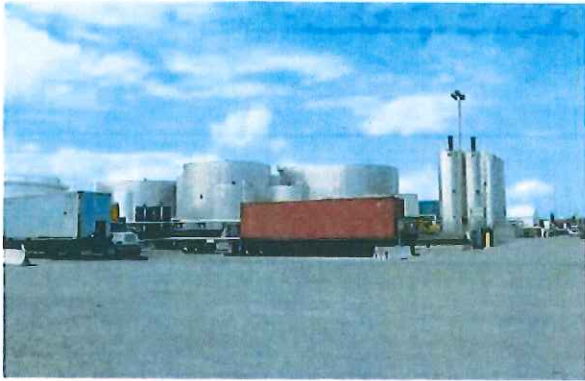
#### Attachments

CF: (w/attachments):  
Emera (D. McLellan)  
AECOM (K. Peterman) ✓  
DOE-HQ (J. Anderson)



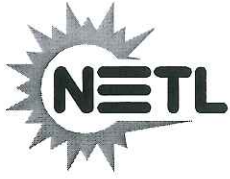


Compressed Natural Gas (CNG) Environmental Assessment (EA)  
 Figure 1 | Proposed CNG Facility to Vessel Delivery Route



Compressed Natural Gas (CNG) Environmental Assessment (EA)  
Figure 2 | Proposed CNG Lease Area Existing Conditions





October 15, 2014

Mr. David Keys, SERO NEPA Coordinator  
NOAA Fisheries Service, Southeast Regional Office  
263 13<sup>th</sup> Avenue South  
St. Petersburg, FL 33701

**SUBJECT: Environmental Assessment for the Emera CNG, LLC, Compressed Natural Gas Project, Port of Palm Beach, Florida (DOE/EA-1976)**

The U.S. Department of Energy's (DOE) National Energy Technology Laboratory (NETL) has determined, following a review conducted in accordance with the DOE's National Environmental Policy Act (NEPA) Implementing Procedures, that preparation of an Environmental Assessment (EA) is the appropriate level of environmental review for the Emera CNG, LLC Compressed Natural Gas Project, located in Port of Palm Beach, Florida

DOE's proposed action and subject of the EA is to grant authorization under Section 3 of the National Gas Act (NGA), 15 U.S.C. § 717b and Part 590 of the regulations of the Department of Energy (DOE), 10 C.F.R. § 590 in response to Emera's application. Emera's proposed project is to export up to 9.125 billion cubic feet (Bcf) per annum (0.025 Bcf per day) of gaseous compressed natural gas (CNG). DOE is not providing funding or financial assistance to Emera.

Emera is seeking authorization to export CNG via truck and ocean going carrier from the State of Florida to Grand Bahama, or any other country not prohibited by United States trade law or policy.

Emera would construct a CNG compression facility within the Port of Palm Beach, off the Riviera Lateral, near an existing intrastate pipeline. The facility will consist of dehydration, compression and filling equipment with a nominal loading capacity of 0.025 Bcf per day. Pressure vessels would be loaded with CNG into tank containers. Each container would be comprised of multiple fixed tanks (either 8 or 12 tanks) within a steel frame 40' long by 8' wide by 6.75' high. These containers meet the International Organization of Standardization (ISO) for shipping. The combined tankage per shipping container will be filled with natural gas to 3600 psig. The total amount of gas per tank container would be approximately 500,000 standard cubic feet. In the initial phase there would be 13 to 16 filling posts for simultaneous filling of tank containers. Once filled with CNG, the tank containers would be hauled by truck onto a roll on/roll off ocean-going carrier vessel located approximately 2,500 feet away at its mooring point. Haul trucks would stay within the developed Port of Palm Beach facility. It is anticipated that one ocean-going carrier would leave the port each day.

Phase I; During the initial phase the facility would compress and load approximately 8 inflow and outflow roll trailers per day, while Phase II will be at full infrastructure build-out where it is anticipated that up to 16 trailers would enter and exit the facility each day.

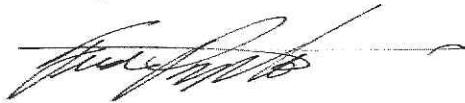
In accordance with DOE NEPA implementing procedures, DOE must evaluate the potential environmental impacts of its proposed action that could have a significant impact on human health and the environment, including decisions on whether to provide authorization. In compliance with these regulations and DOE's procedures, the EA will examine the potential environmental impacts of the proposed action and the No-Action Alternative and will identify any unavoidable adverse environmental impacts of the proposed action. This EA (*when final*) will fulfill DOE's obligations under NEPA and provide DOE with the information needed to make an informed decision to authorize Emera's proposed project.

DOE considers this informal consultation as a request for any information you may have on species or habitat of biological significance within the vicinity of the Emera project or any comments or concerns you have on the potential for this project to affect these habitats and/or species. This information is being requested to aid in the preparation of the EA and to meet DOE's obligations under Section (7)(a)(2) of the Endangered Species Act of 1973 *as amended*. DOE has identified the West Indian Manatee (*Trichechus manatus*, including two subspecies) to occur within the project area. The Emera Project will not involve any construction below ordinary high water, and modifications to the docking area have already been properly permitted and constructed by the Port of Palm Beach. For this reason, at this time, DOE has made a preliminary determination that the Emera Project is not likely to adversely affect this species or its habitat.

DOE's NETL is currently preparing the Draft EA for this project and estimates it will be made available for public comment in Mid-November 2014 with a 30-day public comment period. At this time, DOE does not anticipate holding a public hearing on the Draft EA. However, DOE will consider requests for a hearing if such request is submitted during the comment period. The EA will be available on NETL's NEPA website. A hard copy of the Draft EA will also be sent to your office, where you may again respond to any specific comments or concerns you may have with the project. If you have any such information, or wish to offer any questions or comments about the Emera project, please contact DOE's NETL using the contact information provided below:

ATTN: Fred Pozzuto  
U.S. Department of Energy  
National Energy Technology Laboratory  
3610 Collins Ferry Road  
P.O. Box 880  
Morgantown, WV 26507  
Office phone: 304-285-5219  
Email: [fred.pozzuto@netl.doe.gov](mailto:fred.pozzuto@netl.doe.gov)

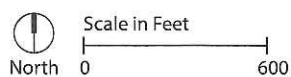
Sincerely,



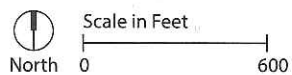
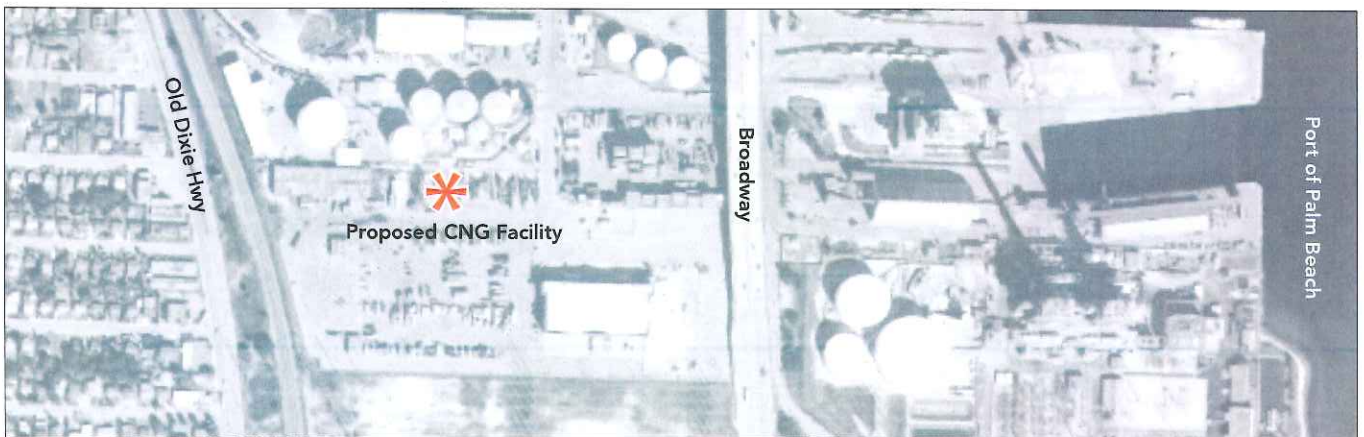
Fred E. Pozzuto  
Environmental Manager / NEPA Compliance Officer

#### Attachments

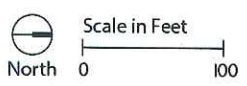
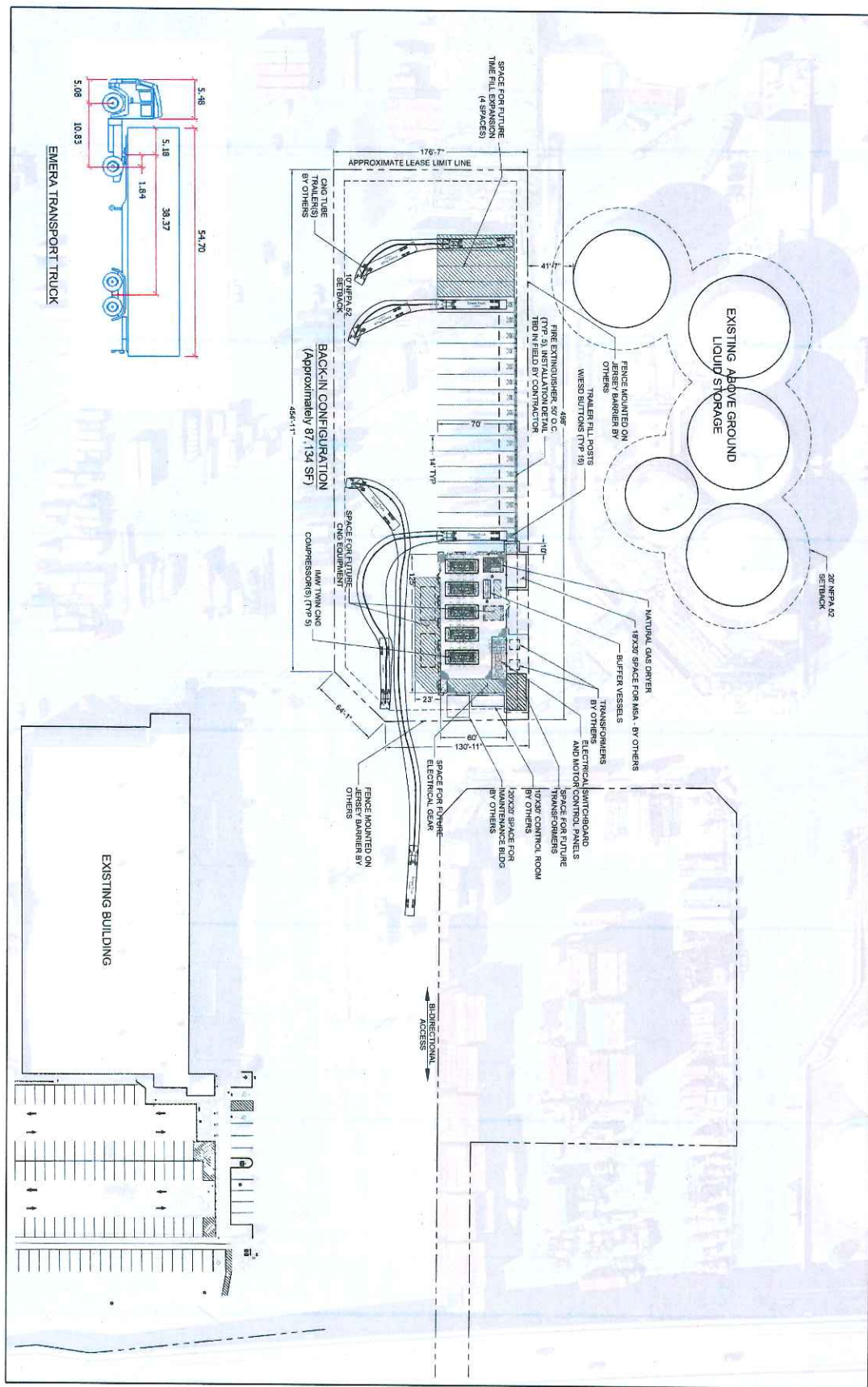
CF: (w/attachments):  
Emera (D. McLellan)  
AECOM (K. Peterman) ✓  
DOE-HQ (J. Anderson)



**Compressed Natural Gas (CNG) Environmental Assessment (EA)**  
**Figure 1 | Proposed CNG Facility to Vessel Delivery Route**



Compressed Natural Gas (CNG) Environmental Assessment (EA)  
Figure 2 | Proposed CNG Lease Area Existing Conditions



Compressed Natural Gas (CNG) Environmental Assessment (EA)  
Figure 3 | Clean Energy Fueling Station



## **APPENDIX C**

### **Scientific Names Referenced**

### Appendix C. Scientific Names Referenced

Common Name	Scientific Name
<b>Plants</b>	
Australian pines	<i>Casuarina equisetifolia</i>
beach star	<i>Remirea maritime</i>
Johnson's seagrass	<i>Halophila johnsonii</i>
manatee grass	<i>Syringodiul filiforme</i>
paddle grass	<i>Halophila decipiens</i>
shoal grass	<i>Halodule wrightii</i>
star grass	<i>Halophila engelmannii</i>
turtle grass	<i>Thalassia testudinum</i>
widgeon grass	<i>Ruppia maritima</i>
<b>Mammals</b>	
West Indian manatee	<i>Trichechus manatus</i>
<b>Reptiles</b>	
green sea turtle	<i>Chelonia mydas</i>
leatherback turtle	<i>Dermochelys coriacea</i>
loggerhead turtle	<i>Caretta caretta</i>
<b>Fish/Crustaceans</b>	
angelfish	<i>Pterophyllum scalare</i>
great barracuda	<i>Sphyraena barracuda</i>
blue crab	<i>Callinectes sapidus</i>
damsel fish	<i>Chrysiptera</i> sp.
flounder	<i>Paralichthys</i> sp.
grouper	<i>Epinephelus</i> sp.
grunt	<i>Haemulon</i> sp.
jack	<i>Caranx</i> sp.
mojarra	<i>Gerres</i> sp.
mullet	<i>Mugil cephalus</i>
parrotfish	<i>Scarus</i> sp.
puffers	<i>Sphoeroides</i> sp.
ray	various genera
shark	various genera
skate	<i>Raja</i> sp.
snapper	<i>Lutjanus</i> sp.
spadefish	<i>Chaetodipterus faber</i>
spiny lobster	<i>Panulirus argus</i>
tarpon	<i>Megalops atlanticus</i>
triggerfish	<i>Balistes</i> sp.
wrass	<i>Halichoeres</i> sp.
yellowtail	<i>Ocyurus chrysurus</i>

## **APPENDIX D**

### **Public Comments Received**



**FLORIDA DEPARTMENT OF  
ENVIRONMENTAL PROTECTION**

MARJORY STONEMAN DOUGLAS BUILDING  
3900 COMMONWEALTH BOULEVARD  
TALLAHASSEE, FLORIDA 32399-3000

RICK SCOTT  
GOVERNOR

CARLOS LOPEZ-CANTERA  
LT. GOVERNOR

JONATHAN P. STEVERSON  
SECRETARY

March 27, 2015

Mr. Fred E. Pozzuto, P.E., P.G.  
Environmental Manager/NEPA Compliance Officer  
National Energy Technology Laboratory  
U.S. Department of Energy  
P.O. Box 880, M.S. B07  
Morgantown, WV 26507-0880

RE: U.S. Department of Energy – Draft Environmental Assessment for the  
Emera CNG, LLC, Compressed Natural Gas Project, Port of Palm Beach –  
Riviera Beach, Palm Beach County, Florida.  
SAI # FL201502137190C

Dear Mr. Pozzuto:

The Florida State Clearinghouse has coordinated a review of the U.S. Department of Energy's Draft Environmental Assessment (EA) for the Emera CNG, LLC project under the following authorities: Presidential Executive Order 12372; § 403.061(42), *Florida Statutes*; the Coastal Zone Management Act, 16 U.S.C. §§ 1451-1464, as amended; and the National Environmental Policy Act, 42 U.S.C. §§ 4321-4347, as amended.

The following agencies submitted comments, concerns and recommendations regarding the Draft EA, all of which (memoranda and letters) are attached hereto, incorporated herein by this reference, and made an integral part of this letter:

- Florida Department of Environmental Protection
- Florida Fish and Wildlife Conservation Commission
- Florida Department of Transportation
- City of Riviera Beach

Based on the information contained in the Draft EA and enclosed state agency comments, the state has determined that, at this stage, the proposed federal action is consistent with the Florida Coastal Management Program (FCMP). To ensure the project's continued consistency with the FCMP, the concerns identified by our reviewing agencies must be addressed prior to project implementation. The state's continued concurrence will be based on the activity's compliance with FCMP authorities, including federal and state monitoring of the activity to ensure its continued conformance, and the adequate resolution of issues identified during this and

Mr. Fred E. Pozzuto, P.E., P.G.  
Page 2 of 2  
March 27, 2015

subsequent regulatory reviews. The state's final concurrence of the project's consistency with the FCMP will be determined during the environmental permitting process, in accordance with Section 373.428, *Florida Statutes*.

Thank you for the opportunity to review the draft document. Should you have any questions regarding this letter, please don't hesitate to contact me at [Lauren.Milligan@dep.state.fl.us](mailto:Lauren.Milligan@dep.state.fl.us) or (850) 245-2170.

Yours sincerely,



Lauren P. Milligan, Coordinator  
Florida State Clearinghouse  
Office of Intergovernmental Programs

Enclosures

ec: Paul Wierzbicki, DEP, Southeast District  
Scott Sanders, FWC  
Martin Markovich, FDOT  
Stephanie Heidt, TCRPC



# Florida

Department of Environmental Protection

"More Protection, Less Process"



## Categories

[DEP Home](#) | [OIP Home](#) | [Contact DEP](#) | [Search](#) | [DEP Site Map](#)

Project Information	
<b>Project:</b>	FL201502137190C
<b>Comments Due:</b>	03/27/2015
<b>Letter Due:</b>	04/14/2015
<b>Description:</b>	U.S. DEPARTMENT OF ENERGY - DRAFT ENVIRONMENTAL ASSESSMENT FOR THE EMERA CNG, LLC, COMPRESSED NATURAL GAS PROJECT, PORT OF PALM BEACH - RIVIERA BEACH, PALM BEACH COUNTY, FLORIDA.
<b>Keywords:</b>	DOE - EMERA CNG COMPRESSED NATURAL GAS PROJECT, PORT OF PALM BCH - PALM BCH CO.
<b>CFDA #:</b>	81.089
Agency Comments:	
<b>FISH and WILDLIFE COMMISSION - FLORIDA FISH AND WILDLIFE CONSERVATION COMMISSION</b>	
<p>The FWC advises that Florida manatees are known to frequent the waters near the Port of Palm Beach area and FWC has records of eight manatee mortalities within a 0.5-mile radius of the project area since 2005. The draft EA states that "the ocean-going vessels utilized by the CNG facility would comply with all port procedures to minimize potential impacts to aquatic resources as a result of project operations. The use of seawater for ballast or cooling would not have an impact on aquatic resources. The water used for cooling would have a higher temperature upon discharge as compared to intake which could attract manatees." The draft EA lacks additional information as to where the warm water would be discharged, how often the discharges would occur, what the approximate temperature of the warm water would be, and how much warmer the temperature would be compared to ambient water. FWC staff cannot determine potential impacts of the proposed project on manatees without the additional information listed above as the impacts are determined on a case-by-case basis. FWC requests that the applicant contact the FWC staff identified below to discuss avoidance and minimization measures for manatees. Additionally, staff recommends that the applicant coordinate with the USFWS for information regarding manatees as well as any other federally listed species that may be impacted by the proposed project. The USFWS South Florida Ecological Services Office may be contacted at (772) 562-3909 to discuss any necessary federal requirements.</p>	
<b>TRANSPORTATION - FLORIDA DEPARTMENT OF TRANSPORTATION</b>	
<p>Based on the information available to review, there is the potential during construction and operation of the CNG facility for overweight vehicles and/or equipment to be transported on the State Highway System. Operation of overweight/overdimensional vehicles by the applicant on State transportation facilities will be subject to the requirements of Sections 316.550 and 316.535, Florida Statutes, and Rule Chapter 14-26, Florida Administrative Code, "Safety Regulations and Permitting Fees for Overweight and Overdimensional Vehicles." Additional information regarding permits can be found at: <a href="https://gis.dot.state.fl.us/OneStopPermitting/Permits/OverweightOverdimensionalPermits">https://gis.dot.state.fl.us/OneStopPermitting/Permits/OverweightOverdimensionalPermits</a> and by calling the State Permits Office at (850) 410-5777. Any project activities performed within FDOT right-of-way and the staging and storage of equipment or materials within FDOT right-of-way will require coordination with appropriate FDOT District 4 personnel. Proposed activities within FDOT right-of-way will require plans review by, and close coordination with, FDOT. The issuance of permits from FDOT may also be required. Should the need for lane closures or traffic channeling on the state roadway system arise, Maintenance of Traffic Plans may be necessary. Coordination with FDOT District 4 will be required for this work. If any hazardous materials will need to be transported on FDOT roads, a hazardous spills response plan will need to be prepared and coordination with FDOT District 4 will be required. Please contact Mr. Brett Drouin at FDOT's Palm Beach Operations Center at (561) 370-1134 or <a href="mailto:brett.drouin@dot.state.fl.us">brett.drouin@dot.state.fl.us</a> for any permitting questions.</p>	
<b>ENVIRONMENTAL PROTECTION - FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION</b>	
<p>The Department's Southeast District Office in West Palm Beach has reviewed the proposal and provided a number of comments regarding the management of hazardous, petroleum and solid waste at the Emera CNG facility site and the state permits required to construct and operate the proposed facility. The Draft EA was also been forwarded to Laxmana Tallam at</p>	

the Palm Beach County Health Department for local review. Should you have any questions on the enclosed DEP memo, please feel free to contact Mr. Paul Wierzbicki, P.G., at 561-681-6677 or Paul.Wierzbicki@dep.state.fl.us. The Department's Division of Air Resource Management and Siting Coordination Office also reviewed the document and have no comments on the air portion of the Draft EA.

**STATE - FLORIDA DEPARTMENT OF STATE**

No Comment/Consistent

**SOUTH FLORIDA WMD - SOUTH FLORIDA WATER MANAGEMENT DISTRICT**

SFWMD has no comments on this project. Based on the operating agreement with FDEP, any ERP required for this project is the responsibility of FDEP.

**TREASURE COAST RPC - TREASURE COAST REGIONAL PLANNING COUNCIL**

No adverse effects on regional resources or facilities and no extrajurisdictional impacts have been identified. The City of Riviera Beach provided a letter which was adopted as part of Council's report on March 20, 2015. City staff has requested further detailed information on the potential effects of the compressed natural gas facility and shipping on the environment and citizens in adjacent residential communities.

For more information or to submit comments, please contact the Clearinghouse Office at:

3900 COMMONWEALTH BOULEVARD, M.S. 47  
TALLAHASSEE, FLORIDA 32399-3000  
TELEPHONE: (850) 245-2161  
FAX: (850) 245-2190

Visit the [Clearinghouse Home Page](#) to query other projects.

[Copyright](#)

[Disclaimer](#)

[Privacy Statement](#)

## Memorandum

## Florida Department of Environmental Protection

---

**TO:** Lauren Milligan, Office of Intergovernmental Programs  
*ppw*

**FROM:** Paul Wierzbicki, P.G., Southeast District Office

**DATE:** March 16, 2015

**SUBJECT:** U.S. Department of Energy – Draft Environmental Assessment (EA) for the Emera CNG, LLC, Compressed Natural Gas Project, Port of Palm Beach – Riviera Beach, Palm Beach County, Florida.  
SAI # FL15-7190C

---

The subject Florida State Clearinghouse review involves the U.S. Department of Energy's evaluation of the environmental effects of a facility proposing to construct and operate facilities to receive, dehydrate, and compress natural gas that will be transported via trailers, tank containers, and ocean-going carriers for export through the Port of Palm Beach to Freeport Harbour, Grand Bahama Island and other future markets. The proposed Emera facility will initially be capable of loading 8 million standard cubic feet per day (MMscfd) of CNG into ISO containers and, after full build out, will be capable to load up to 25 MMscfd.

The Department's Southeast District Office staff has reviewed the Draft EA and offers the following comments:

1. The Draft EA does not appear to include information on prior environmental assessments that have been conducted or will be conducted to determine whether soil, sediments, groundwater, or surface waters have been adversely affected (contaminated) by former industrial activities at the Port of Palm Beach. Part of the environmental assessment should include, among other things: the details of historical potential hazardous materials handling in relation to canals and surface water bodies; locations of any above-ground, underground or temporary storage tanks, equipment maintenance and storage, petroleum product storage, on-site landfill/solid waste disposal areas, hazardous materials handling areas, septic tanks, pipelines; and locations and types of any water production wells within a one-mile radius of the site boundary (potable, pesticide make-up, irrigation, industrial, etc.). Groundwater flow directions in all affected zones needs to be provided. What soil, sediment, surface water and groundwater cleanup concentrations would be proposed? Please be advised that Rule 62-780, Florida Administrative Code (F.A.C.), entitled "Contaminated Site Cleanup Criteria" and Rule 62-777, F.A.C., may be applicable, depending on the findings of the environmental assessments. These rules may be found at the following website: <http://www.dep.state.fl.us/waste>.
2. The applicant should be advised that environmental contamination assessment and cleanup decisions are based on, among other things, projected future uses of the property and the



potential for exposure to site workers, future residents, workers, etc. The applicant should seek legal advice to be fully appraised of the potential future liabilities with regard to “due diligence” responsibilities and the result of spreading any contamination from untested soils and groundwater off-site or to previously uncontaminated areas.

3. Based on staff’s experience, the accurate identification, characterization and cleanup of sites requires experienced consulting personnel and laboratory support, management commitment of the developers and their representatives, and will likely be very time-consuming. Early planning to address these issues is essential to meet construction and cleanup (if required) timeframes. Innovative technologies, such as special stormwater management systems, engineering controls and institutional controls, such as conditions on water production wells and dewatering restrictions, may be required, depending on the results of environmental assessments.
4. The applicant is advised that many types of facilities generate some type of hazardous material, especially during construction activities (paints, solvents, sealants, adhesives, oils, roofing coatings, etc.) For example, lubricating oils used in generators, air compressors and machinery are frequently handled. Please be advised that petroleum storage tanks at fuel stations and for emergency generators must be constructed to comply with the current requirements of Chapter 62-761 or 62-762, F.A.C., as appropriate.
5. What specific steps does the applicant propose in order to dispose of land clearing debris and construction and demolition debris generated during facility construction? Chapter 62-701, F.A.C., contains regulations governing solid waste management. Other local regulations may also be applicable.
6. A staging area, with controlled access, should be planned in order to safely store raw material paints, adhesives, oils, sealants, fuels, solvents, etc. that will be used during construction. All containers need to be properly labeled. The project developers should consider developing a written construction Contingency Plan in the event of a natural disaster (*e.g.*, hurricane), spill, fire or environmental release of hazardous materials stored/handled for the project construction. Contingency planning should also include details on how construction and hazardous materials would be safely stored and secured prior to a hurricane or natural disaster.
7. Page 18 lists some of the waste streams expected to be generated during construction and facility operations. Please be advised that hazardous waste determinations must be conducted on all waste streams, including “contaminated water from the gas dryer” (Page 28) in accordance with Title 40 Code of Federal Regulations, Part 262.11 as referenced in Chapter 62-730, F.A.C. If the material is hazardous, then it must be recycled, treated, stored, or disposed at a hazardous waste facility authorized by the Department, EPA or another state. Hazardous waste cannot be disposed on or in the ground, or in local landfills, septic tanks, or injection wells. Also, regardless of quantity, the generator of hazardous

waste is ultimately responsible for the waste from “cradle to grave,” and can be held liable for improper management of hazardous waste even though it may have been sent to an authorized hazardous waste management facility using a licensed transporter authorized by the Department. Claims that material is not a waste or is exempt from must be documented. [Rule 62-730.030(4), F.A.C.] In addition, generators must keep records of hazardous waste generated that were subsequently managed pursuant to an exclusion. The hazardous waste regulations may be found on the following internet site:

<http://www.dep.state.fl.us/waste/categories/hwRegulation/pages/FLEHazInstructions.htm>

and forms may be found at:

[http://www.dep.state.fl.us/waste/quick\\_topics/forms/pages/62-730.htm](http://www.dep.state.fl.us/waste/quick_topics/forms/pages/62-730.htm)

Permits/Authorizations Needed:

8. Pages 16-17 of the Draft EA state that construction will involve, “ground preparation, installation of foundations for the building and equipment pads, installation of electrical and utility trenches, installation of natural gas pipelines and equipment, and anchoring of the equipment.” Please be advised that projects involving “dewatering” may require permitting by the South Florida Water Management District’s Water Use Section.
9. The project has the potential to adversely impact water quality and or quantity from stormwater runoff at the proposed facility. As a result, an Environmental Resource Permit (ERP) and/or modification of the Port’s existing permit may be required to address the aforementioned requirements, pursuant to Section 62-330.020, F.A.C.
10. The document indicates on Page 36 that the applicant would coordinate with the FDEP and Palm Beach County Health Department to ensure the facility is in compliance with state air quality regulations. Please be advised that the Florida Department of Health in Palm Beach County is authorized by the Department to issue permits for air pollution sources in Palm Beach County. This should be included in Table 2-1 on Pages 21-22. Information and applications related to air permitting can be sent to the Health Department at:

Palm Beach County Health Department  
Division of Environmental Public Health  
Air & Waste Section  
800 Clematis Street, 4<sup>th</sup> Floor  
West Palm Beach, FL 33402  
Phone: 561-837-5900

References:

Chapters 373, 376 and 403, Florida Statutes, which incorporate the provisions of Chapters 62-4, 62-160, 62-204, 62-210, 62-212, 62-213, 62-214, 62-256, 62-257, 62-285, 62-296, 62-297,

U.S. Department of Energy – Draft EA, Emera CNG, LLC  
SAI # FL15-7190C  
Southeast District Comments  
Page 4 of 4

62-302, 62-330, 62-520, 62-701, 62-710, 62-730, 62-761, 62-762, 62-777, and 62-780, F.A.C.  
These rules and other rules of the Department may be found at the following internet links:

<http://www.dep.state.fl.us/water/rules.htm>

[http://www.dep.state.fl.us/waste/quick\\_topics/rules/default.htm](http://www.dep.state.fl.us/waste/quick_topics/rules/default.htm)

<http://www.dep.state.fl.us/air/rules/current.htm>

Thank you for the opportunity to comment. Should you have any questions, please feel free to contact me at 561-681-6677 or [Paul.Wierzbicki@dep.state.fl.us](mailto:Paul.Wierzbicki@dep.state.fl.us).



**Florida Fish  
and Wildlife  
Conservation  
Commission**

Commissioners  
**Richard A. Corbett**  
Chairman  
Tampa

**Brian Yablonski**  
Vice Chairman  
Tallahassee

**Ronald M. Bergeron**  
Fort Lauderdale

**Richard Hanas**  
Oviedo

**Aliese P. "Liesa" Priddy**  
Immokalee

**Bo Rivard**  
Panama City

**Charles W. Roberts III**  
Tallahassee

Executive Staff  
**Nick Wiley**  
Executive Director

**Eric Sutton**  
Assistant Executive Director

**Jennifer Fitzwater**  
Chief of Staff

Office of the  
Executive Director  
**Nick Wiley**  
Executive Director

(850) 487-3796  
(850) 921-5786 FAX

*Managing fish and wildlife  
resources for their long-term  
well-being and the benefit  
of people.*

---

620 South Meridian Street  
Tallahassee, Florida  
32399-1600  
Voice: (850) 488-4676

Hearing/speech-impaired:  
(800) 955-8771 (T)  
(800) 955-8770 (V)

MyFWC.com

March 25, 2015

Lauren Milligan  
Florida State Clearinghouse  
Florida Department of Environmental Protection  
3900 Commonwealth Boulevard, M.S. 47  
Tallahassee, FL 32399-3000  
[Lauren.Milligan@dep.state.fl.us](mailto:Lauren.Milligan@dep.state.fl.us)

Re: SAI #FL201502137190C, U.S. Department of Energy – Draft Environmental Assessment for the Emera CNG, LLC, Compressed Natural Gas Project, Port of Palm Beach – Riviera Beach, Palm Beach County, Florida

Dear Ms. Milligan:

Florida Fish and Wildlife Conservation Commission (FWC) staff has reviewed the above-referenced project, and provides the following comments for your consideration in accordance with the National Environmental Policy Act (NEPA) and FWC's authorities under the Coastal Zone Management Act/Florida Coastal Management Program.

### **Project Description**

The U.S. Department of Energy (DOE) has prepared a draft Environmental Assessment (EA) to evaluate the potential environmental impacts that would occur as a result of the construction and operation of a proposed Compressed Natural Gas (CNG) Facility by Emera at the Port of Palm Beach, Riviera Beach, Florida. Emera's proposed facility at the Port of Palm Beach is for the purpose of compressing and exporting natural gas via trailers, tank containers, and ocean-going carriers to a facility constructed and operated at Freeport Harbour, Grand Bahama Island (for the initial phase) and other potential markets (in future phases).

Emera's CNG plant would include facilities to receive, dehydrate, and compress natural gas to fill pressure vessels with an open International Organization for Standardization container frame mounted on trailers. The facility will be constructed in a portion of the Port of Palm Beach that was previously used for industrial activity and no construction is being proposed within the water. Emera plans to truck the trailers a distance of one quarter mile from its proposed CNG facility to a berth at the Port of Palm Beach, where the trailers would be loaded onto a roll-on/roll-off ocean going carrier. During transport, ocean-going carriers would comply with the appropriate International Convention for the Prevention of Pollution from Ships (MARPOL) regulations to minimize potential impacts from ocean-going carrier waste trips to and from the island of Grand Bahama and other potential destinations. Additionally, Emera plans to receive natural gas at its planned compression facility from the Riviera Lateral, a pipeline owned and operated by Peninsula Pipeline Company. Additionally, the initial phase proposes one ocean-going carrier per day.

### **Potentially Affected Resources**

A geographic information system (GIS) analysis found that the project site contains, is adjacent to, or occurs near:

- U.S. Fish and Wildlife Service (USFWS) consultation area and critical habitat for:
  - Florida scrub-jay (*Aphelocoma coerulescens*, Federally Threatened [FT])
- Wood stork (*Mycteria americana*, FT) core foraging areas (CFA), defined as an 18.6-mile radius around wood stork nesting colonies, for one wood stork colony:
  - PBC SWA
- Potential habitat for federally listed species:
  - Florida manatee (*Trichechus manatus latirostris*, Federally Endangered)

Additionally, the EA states that the project site does not contain any natural areas as it is currently paved and no threatened or endangered species are known or suspected to occur on the site.

### Comments and Recommendations

Manatees are known to frequent the waters near the Port of Palm Beach area and FWC has records of eight manatee mortalities within a 0.5-mile radius of the project area since 2005. The draft EA states that “the ocean-going vessels utilized by the CNG facility would comply with all port procedures to minimize potential impacts to aquatic resources as a result of project operations. The use of seawater for ballast or cooling would not have an impact on aquatic resources. The water used for cooling would have a higher temperature upon discharge as compared to intake which could attract manatees.” The draft EA lacks additional information as to where the warm water would be discharged, how often the discharges would occur, what the approximate temperature of the warm water would be, and how much warmer the temperature would be compared to ambient water. FWC staff cannot determine potential impacts of the proposed project on manatees without the additional information listed above as the impacts are determined on a case-by-case basis. FWC requests that the applicant contact the FWC staff identified below to discuss avoidance and minimization measures for manatees. Additionally, we recommend the applicant coordinate with the USFWS for information regarding manatees as well as any other federally listed species that may be impacted by the proposed project. The USFWS South Florida Ecological Services Office may be contacted at (772) 562-3909 to discuss any necessary federal requirements.

We appreciate the opportunity to review the draft EA and FWC staff is available to provide technical assistance as needed to minimize potential impacts to fish and wildlife resources. We find the information submitted to this point consistent with FWC’s authorities under the Coastal Zone Management Act/Florida’s Coastal Management Program. If you need any further assistance, please do not hesitate to contact Jane Chabre either by phone at (850) 410-5367 or by email at [FWCConservationPlanningServices@MyFWC.com](mailto:FWCConservationPlanningServices@MyFWC.com). If you have specific technical questions regarding the content of this letter, please contact Marissa Krueger by phone at (561) 882-5711 or by email at [Marissa.Krueger@MyFWC.com](mailto:Marissa.Krueger@MyFWC.com).

Sincerely,



Jennifer D. Goff  
Land Use Planning Program Administrator  
Office of Conservation Planning Services

jdjg/mk  
ENV 1-3-2  
Emera Compressed Natural Gas Facility DOE-EA\_20679\_032515

cc: Fred Pozzuto, DOE, [fred.pozzuto@netl.doe.gov](mailto:fred.pozzuto@netl.doe.gov)



## *Florida Department of Transportation*

RICK SCOTT  
GOVERNOR

3400 West Commercial Blvd.  
Fort Lauderdale, FL 33309

JIM BOXOLD  
SECRETARY

### **MEMORANDUM**

TO: Lauren Milligan, Coordinator, Florida State Clearinghouse

FROM: Larry Hymowitz, Planning Specialist – Policy Planning & Growth Management, District Four

DATE: March 19, 2015

SUBJECT: U.S. Department of Energy – Draft Environmental Assessment for the Emera CNG, LLC, Compressed Natural Gas Project, Port of Palm Beach – Riviera Beach, Palm Beach County, Florida.  
SAI # FL201502137190C

The Florida Department of Transportation (FDOT), District 4 offers the following comments on the Draft EA:

- Based on the information available to review, there is the potential during construction and operation of the CNG facility for overweight vehicles and/or equipment to be transported on the State Highway System. Operation of overweight/over-dimensional vehicles by the applicant on State transportation facilities will be subject to the requirements of Sections 316.550 and 316.535, Florida Statutes, and Rule Chapter 14-26, Florida Administrative Code, "Safety Regulations and Permitting Fees for Overweight and Over-dimensional Vehicles." Additional information regarding permits can be found at: <https://gis.dot.state.fl.us/OneStopPermitting/Permits/OverweightOverdimensionalPermits> and by calling the State Permits Office at (850) 410-5777.
- Any project activities performed within FDOT right-of-way and the staging and storage of equipment or materials within FDOT right-of-way will require coordination with appropriate FDOT District 4 personnel. Proposed activities within FDOT right-of-way will require plans review by, and close coordination with, FDOT. The issuance of permits from FDOT may also be required.
- Should the need for lane closures or traffic channeling on the state roadway system arise, Maintenance of Traffic Plans may be necessary. Coordination with FDOT District 4 will be required for this work.
- If any hazardous materials will need to be transported on FDOT roads, a hazardous spills response plan will need to be prepared and coordination with FDOT District 4 will be required.
- Please contact Mr. Brett Drouin at FDOT's Palm Beach Operations Center at (561) 370-1134 or [brett.drouin@dot.state.fl.us](mailto:brett.drouin@dot.state.fl.us) for any permitting questions.



OFFICE OF  
CITY MANAGER

# CITY OF RIVIERA BEACH

600 WEST BLUE HERON BLVD. • RIVIERA BEACH, FLORIDA 33404  
(561) 845-4010 FAX (561) 840-3353

March 12, 2015

*Sent via Email and U.S. Mail:*

[sheidt@tcrpc.org](mailto:sheidt@tcrpc.org)

[fred.pozzuto@netl.doe.gov](mailto:fred.pozzuto@netl.doe.gov)

**Treasure Coast Regional Planning Council**

**ATTN: Stephanie Heidt, Intergovernmental Coordinator**

421 SW Camden Avenue

Stuart, Florida 34994

**U.S. Department of Energy**

**National Energy Technology Laboratory**

**ATTN: Fred Pozzuto, NEPA Compliance Officer**

3610 Collins Ferry Road

P.O. Box 880 Morgantown, WV 26507-0880

RE: Draft Environmental Assessment, Emera CNG, LLC, Compressed Natural Gas Project,  
Port of Palm Beach, Florida (DOE/EA-1976D)

Dear Ms. Heidt and Mr. Pozzuto:

Thank you for this opportunity to review and provide comments on the abovementioned Draft Environmental Assessment (hereinafter EA). Administrative Staff of the City of Riviera Beach (hereinafter City) received a copy of the "Notice of Availability" containing a link to this EA regarding the compressed natural gas (hereinafter CNG) proposal set forth by Emera CNG, LLC (hereinafter Emera) from the Treasure Coast Regional Planning Council via email on February 16, 2015; (the EA is a 113 page pdf document, dated February 2015). According to EA Appendix 'A', "Distribution List", Administrative Staff from the Port of Palm Beach (hereinafter POPB) were provided a copy of the EA directly, while the only entity from the City included on the Distribution List was the City's Public Library. Since the POPB exists within the City's municipal boundaries and falls within the City's jurisdiction, we request that the City be added to the distribution list on future correspondence as follows:

ATTN: Ruth C. Jones, City Manager

City of Riviera Beach  
600 West Blue Heron Blvd.  
Riviera Beach, FL 33404  
T: (561)845-4010  
Email Address: [rjones@rivierabch.com](mailto:rjones@rivierabch.com)

The City also requests clarification on the project title assigned to this EA; “Emera CNG, LLC, Compressed Natural Gas Project, Port of Palm Beach, Florida”. This title suggests that the POPB is not associated with the City or Palm Beach County (hereinafter PBC). Additionally, this title is not geographically specific, being that the POPB falls within the jurisdiction of the City. Furthermore, the EA “Cover Sheet” (pages i and ii) as well as the EA “Summary” (pages 1 through 7) fail to mention that this project proposal is within the City of Riviera Beach or Palm Beach County. The EA “Introduction” section first mentions “Riviera Beach” on page 8, which appears to be too far into the document. The aforementioned items may cause City residents and/or stakeholders to misinterpret the location of the project proposal, resulting in the preclusion of comments that would otherwise be generated. The City believes that the “City of Riviera Beach” and “Palm Beach County” should appear within the project title and within the body of the report early and often in order to promote clarity and transparency. Additionally, a second draft EA could be released containing these revisions along with an additional public comment period to ensure adequate time for comments.

Also, within the “Availability” section of the EA’s Coversheet, it is stated that a “notice of availability was placed in the South Florida Sun-Sentinel on February 13, 2015, to announce the beginning of the 30-day public review and comment period”. City Staff has concerns that the regional distribution of the South Florida Sun-Sentinel publication (based out of Fort Lauderdale, FL, approximately 50 miles from the City in Broward County) does not adequately cover PBC and in turn, the City’s residents and stakeholders. Other regional newspapers are available, including but not limited to the Palm Beach Post. We believe that this item should be advertised again within a publication customarily having regional distribution within PBC.

In addition to the previously stated items, City Staff has generated the following comments and concerns after review of the EA:

1. The proposed volume of natural gas to be compressed is enormous (9.125 billion standard cubic feet per annum, up to 8 million standard cubic feet per day, with the capability of expanding to load up to 25 million standard cubic feet per day). In a worst case scenario, what is the estimated blast radius if an explosion were to occur? Our calculations indicate that it would be devastating. Our estimation is without factoring in the potential for additional interactions with other adjacent uses and combustible materials.
2. Has a reduced volume of CNG been considered? Why is the proposed amount necessary?



3. What agency would be responsible for ensuring that no more than 9.125 billion standard cubic feet per annum would be shipped from this location? Who is responsible for regulating the total amount of CNG stored on-site and what is the maximum amount allowed?
4. The proposed 9.125 billion standard cubic feet per annum is designated as the “initial phase”. What future phases have been proposed and what approvals would be needed to expand this use if approved? If the currently proposed operation was approved and was successful, it would be logical that Emera would look to expand the distribution range to outside of the Bahamas and increase total production in order to accommodate demand. As provided, Emera has requested approval to export natural gas to countries both with and without free trade agreements (FTA countries and non-FTA countries).
5. This proposal would result in new local environmental impacts; increased ship traffic and associated pollutants emitted from these ships.
6. Emera’s proposal is to supplement or replace one form of non-renewable fossil fuel with another (crude oil with natural gas) lacks long term sustainability. Emera would have the alternative to the proposed action of focusing on renewable power generation in the Bahamas through solar and/wind production, thus avoiding the potential for negative local impacts. As presented, the proposal has little to no benefit to the City of Riviera Beach, yet, the City would have to assume a significant amount of environmental risk and potential costs.
7. According to page 2 of the EA report, it is intended to evaluate “16 resource areas for potential impacts associated with the proposed project. After preliminary evaluation, DOE determined that there would be either no or negligible impacts for eight resource areas: aesthetics and visual resources; land use; community services; cultural resources; geology, topography, and soils; terrestrial resources; noise and vibration; and transportation. Therefore, these eight resource areas were not evaluated in detail in the EA and were not given further consideration”. In reality, there were nine resource areas that were deemed to have no or negligible impacts as the “Utilities” category was not indicated; the EA summary should be revised accordingly.

The City has significant concerns associated with the scope and magnitude of this proposal associated with the following resource areas:

Aesthetics and Visual Resources: On page 11, it is stated that “Port use in Palm Beach predates much of the surrounding residential development along Lake Worth shorelines and the Port educates adjacent communities on the importance of the commerce and the role of the port in the community in an effort to better integrate itself with adjacent areas as it continues to maintain and expand operations”. Port activities that predated residential uses were smaller in scale and had little to no potential to negatively impact the health, safety and welfare of the residents in the area, especially in comparison to the use currently proposed. There seems to be little to no educational material provided or educational process occurring currently. Additional cargo ships that would be required to ship CNG according to this proposal would have a visual impact on the area.

Land use: This proposal would have to adhere to the POPB's Master Plan, PBC's Comprehensive Plan, and the City's Comprehensive Plan, Code of Ordinances and Land Development Regulations. There is little to no discussion of these requirements within the EA. On page 12, it is stated that this project "is proposed to occur in areas zoned industrial within which compressing natural gas is typically a permitted use". Please provide documentation supporting this statement.

Community services: This proposal would impact the ability of City staff to maintain the current level of service we provide to residents and stakeholders. The City's first responders (Police, Fire/EMS) would be expected to serve and coordinate on public safety plans, evacuation strategies and potential implementation. The City may also be responsible for perpetual site inspections. Devoting time to this proposed project would be detrimental to City staff and their ability to serve the existing population. It is stated on page 12 that "the demand would not exceed available capacity of existing services". How was that determined without consulting with the agencies responsible for providing these services?

Noise and vibration: Anticipated decibel levels associated with this operation are not provided. Anticipated hours of operation are not provided. It is stated on page 13 that "...noise and vibration generated as a result of the operation of the proposed facility would be similar to other activities at the ports". This is not adequate to determine anticipated decibel levels from operations.

Transportation: An integral part of this proposal relies on shipping containers full of CNG being trucked onto an ocean-going carrier for transportation. The proposed shipping route would pass by residential and publicly accessible recreational areas. What would the potential blast radius be if a catastrophe occurred prior to a full ship leaving the Palm Beach Inlet? The proposal also requests transportation of CNG to and from other locations as desired by the applicant. Environmental impacts from this could be tremendous in a worst case scenario.

Utilities: Existing utilities are present on site, however, there is no discussion or analysis of potential interactions between the existing FPL Riviera Beach Energy Center and the proposed CNG facility in the event on a catastrophe.

8. According to page 2 of the EA, "the EA discusses the results of the analysis of seven resource areas: water resources, aquatic resources, air quality, solid and hazardous waste, socioeconomics, public and occupational health and safety, and environmental justice. For these resource areas, DOE determined that there would be no impacts or that potential impacts would be minor, temporary or both". The City disagrees with the information provided as it lacks the depth of analysis necessary to adequately describe and compute the risks associated with this proposal.

Individual concerns have been provided below for each resource area:

Water resources: Please provide copies of the POPB's Section 10 and Section 404 permits or include them as supplementary information to the EA or future EIS. The statement is made that "Emera would consult with the Port of Palm Beach and the Florida Department of Environmental Protection (FDEP) to ensure both the project and the Port are in full compliance with local, state, and federal requirements". Please provide documentation supporting that Emera and the Port have guaranteed that the project and the Port will be in full compliance with local requirements. Contaminated water estimated to be generated will be approximately 730 gallons per year. This projection would increase if the use expands. What amount of contaminated water must be generated to classify this as more than just a minor impact? How will the proposed amendments to the regional flood maps impact this proposal? It is stated on page 3 that "no known contamination is present in the groundwater or soils at the project site"; will testing of soil and water be required? One could make the argument that the location meets the EPA definition for a brownfield. What impact would this proposal have on regional water resources in a worst case scenario if there was an explosion?

Aquatic resources: What impact would this proposal have on aquatic resources, including threatened or endangered species in a worst case scenario explosion? It is stated that impacts from this proposed project on "threatened and endangered seagrass, manatees and turtles would be anticipated to be minor as a result of project operations". Although stated as "minor" this proposal would create additional impacts to aquatic resources and to ecologically unique habitat that would not occur if a No-Action Alternative occurred. Additional daily cargo ships would also increase the likelihood of conflicts with objects in and around the Palm Beach Inlet and the POPB. Cargo ships would also produce more water pollution locally.

Air quality: Additional cargo ships would produce more air pollution locally. Trucks within the POPB would produce additional emissions. What impacts are possible due to natural gas leaking or being vented into the atmosphere? If dust might escape into the atmosphere associated with construction activities, would testing of the soils be required to ensure that they are free of contaminants?

Solid and hazardous waste: If soil is disturbed or relocated, would it be tested for potential contaminants since one could make the argument that the location meets the EPA definition for a brownfield?

Socioeconomics: Very few jobs are anticipated to be created during the construction phase and operation phases of this project; less than 10. It is stated that "it is likely that construction jobs would be filled by local or regional construction companies" and that, "the operations stage would result in a small increase in new jobs, likely to be filled from the local population". How is "local"

and “regional” defined? What facts were used to generate and support this statement? Inversely, what is the socioeconomic impact of the proposed use on local property values, public services and public safety; especially in a catastrophe scenario?

Public and occupational health and safety: Significant impacts are provided within the EA on page 6. Specifically, medical emergencies, work-related accidents, potential for chemical releases to affect the facility or port workers or the surrounding public, fires or explosions, technological incidents and terrorist activities. The POPB and Emera have little to no emergency response capabilities and would rely on local and regional assistance for police, fire and EMS services. This is an undue local and City burden that has not been contemplated within the EA as the impacted agencies themselves are not identified within the EA. The EA also states that “the greatest potential safety hazard is a fire or explosion related to a leak or rupture at the facility or within the compressed tanks during shipping”. What is the anticipated evacuation radius or blast zone associated with this proposal; it remains unidentified. Also, the City believes that the connection and disconnection process associated with the filling of tanks prior to shipping presents a risk for mechanical failures or human error, which is not discussed within the EA. The complexity of examining this item seems to exceed the scope of an EA and would require an Environmental Impact Statement, or that the No-Action Alternative would have to be accepted. Page 7 of the EA states that “the construction and operation of the Emera facility would represent a minimum increase in risk to the nearby businesses and communities. With implementation of these best management practices and standard operating procedures, the presence of hazardous materials on the project site would have minor impacts associated with implementation of the proposed action”. This statement is of little comfort to the local citizens that would be forced to live within the proximity of this proposed facility. What statistical analysis has been performed to back the statement above? What facilities or what similar operation can this proposal be compared to? This proposal increases the risk of negative impacts to the health, safety and welfare of the residents of the City, while offering little to no benefit. One would assume that no individual would voluntarily chose to reside next to a facility of this nature, which directly relates to environmental justice concerns.

Environmental justice: (see No. 9 below).

9. Environmental justice has been a concern in the City for decades. Our residents have historically faced a significantly higher amount of detrimental uses than neighboring areas. The 2013 U.S. Census estimate states that the City’s population is predominately Black or African American at 67.47% of the total population. Within PBC, the population is only 17.03% Black or African American. Additionally, the City’s 2013 estimated poverty level is 26.76% while PBC’s is 14.54%. This warrants further analysis and consideration as it appears

that Emera's proposal would not be consistent with the public interest and would have disproportionately adverse impacts on the City's population. This proposal seems to have the potential to significantly benefit other entities involved, but not the City or our residents.

10. On page 7 of the EA, a "Cumulative Impacts" section exists, however it was not expanded upon. There is an absolute need to understand how this proposal would interact with adjacent uses. Also, are there any anticipated impacts associated with the potential for additional phases of this project?
11. This proposal could have a negative impact on property values as fewer individuals would desire to live within close proximity of this proposed use. It may also discourage future investment and development in all areas that may fall within the currently undetermined blast zone. This contradicts the City's desire for redevelopment and growth, especially considering that a majority of the single family neighborhood located to the west of the proposed site falls within the Riviera Beach Community Redevelopment Agency overlay.
12. Figure 2.1, indicates that the proposal is outside of the City's jurisdiction as well as not showing neighboring municipalities (West Palm Beach, Palm Beach, Palm Beach Shores). Figure 2.2 and 2.10 attempts to illustrate the boundary of the POPB, however is it not accurately drawn and requires revision. Also Figure 2.2 is lacking the jurisdictional boundaries of neighboring municipalities.

It is the opinion of the City, that this or any other EA could not adequately analyze and synthesize the multitude of unique and potentially hazardous aspects of this proposal which would cause significant adverse impacts to the environment and community. The fact that the POPB currently handles and stores numerous materials that have the potential to be extremely hazardous individually, illustrates the need to further contemplate how these materials and substances would interact in the event of a worst case scenario explosion. Also, the City has not been able to locate an identical (or similar) project to compare the proposal set forth by Emera. Without a similar project to establish a baseline for analysis, an EA is not configured in the proper manner to allow for the necessary in-depth analysis required for this proposed project. The No-Action Alternative would result in no increased threat to the local environment or population, including adjacent residents and neighboring schools.

Please feel free to contact my office or the Department of Community Development at (561)845-4060.

Sincerely,



Ruth C. Jones  
City Manager

- C: Danny D. Jones, Deputy City Manager
- Troy Perry, Assistant to the City Manager
- Clarence D. Williams, Chief of Police
- Michael Madden, Assistant Chief of Police
- Natalie Moore, Code Enforcement Administrator
- Reginald Duren, Chief of Fire
- Mary McKinney, Director of Community Development
- Jeff Gagnon, Planning and Zoning Administrator
- Luecinda Johnson-Monroe, Executive Assistant



## FLORIDA DEPARTMENT *of* STATE

**RICK SCOTT**  
Governor

**KEN DETZNER**  
Secretary of State

Mr. Fred Pozzuto  
U.S. Department of Energy  
3610 Collins Ferry Road  
P.O. Box 880, MS B07  
Morgantown, West Virginia 26507-0880

February 25, 2015

RE: DHR Project File No.: 2015-0713/Received by DHR: February 13, 2015  
Project: *Draft EA for the Emera CNG, LLC, Compressed Natural Gas Project, Port of Palm Beach*  
County: Palm Beach

Dear Mr. Pozzuto,

This office reviewed the referenced project for possible impact to historic properties listed, or eligible for listing, on the *National Register of Historic Places*. The review was conducted in accordance with Section 106 of the *National Historic Preservation Act of 1966*, as amended, *36 CFR Part 800: Protection of Historic Properties*.

A review of the Florida Master Site File and our records indicate that several cultural resource surveys have been conducted. In September 2008, Janus Research conducted an archaeological and historical survey that included a portion of the project area. Janus identified seven historic structures, six of which constitute a historic resource group 8PB13944, FPL Riviera Plant Project. This office has determined that 8PB13944 is not eligible for listing on the *National Register of Historic Places*.

Based on the information provided for the above referenced project, however, it is the opinion of this office that the proposed undertaking will have no adverse effects upon historic properties listed, or eligible for listing, on the *National Register of Historic Places*, or otherwise of historical, architectural or archaeological value.

For any questions concerning our comments, please contact Mary Berman, Historic Sites Specialist, by phone at 850.245.6333 or by electronic mail at [Mary.Berman@dos.myflorida.com](mailto:Mary.Berman@dos.myflorida.com).

Sincerely,

A handwritten signature in black ink, appearing to read "Robert F. Bendus".

Robert F. Bendus, Director  
Division of Historical Resources  
and State Historic Preservation Officer

Division of Historical Resources  
R.A. Gray Building • 500 South Bronough Street • Tallahassee, Florida 32399  
850.245.6300 • 850.245.6436 (Fax) [dos.myflorida.com/historical](http://dos.myflorida.com/historical)  
*Promoting Florida's History and Culture* VivaFlorida.org





# TOWN OF PALM BEACH

Office of the Town Manager

March 9, 2015

Mr. Fred Pozzuto, NEPA Compliance Officer  
U. S. Department of Energy  
National Energy Technology Laboratory  
3610 Collins Ferry Road  
PO Box 880, Morgantown, WV 26507-0880

RE: DOE/EA -1976D                      Draft Environmental Assessment  
Emera CNG, LLC, Compressed Natural Gas Project  
Port of Palm Beach, Florida

Dear Mr. Pozzuto,

The following items are comments and or questions that the Town of Palm Beach would like to formally submit in response to the above proposed project. Although the project is not located within the municipal boundaries of the Town of Palm Beach, it is in close enough proximity across the Lake Worth Lagoon to have potential impacts on our residents.

These items are as follows:

1. Although the proposed CNG facility as stated is not within our municipal boundaries, we are requesting a listing of all of the standards of the Florida Building Code and Florida Fire Prevention Codes that will be used in the design and construction of this project along with a set of design drawings from the engineer of record so that we may verify compliance of the facility with all applicable codes.
2. We are requesting that you provide us with assurances that the Coast Guard and other key federal and local agencies have approved the proposed CNG facility. This shall include transportation and shipment arrangements through the Palm Beach Inlet.
3. We would also request that Emera Gas Company provide copies and include Town Emergency Response personnel in the indicated development of the Incident Action Plan (working with all key local and federal agencies) for the proposed CNG facility at the Port of Palm Beach. A joint review of the Incident Action Plan should be performed by all stake holders. A review of current shipboard firefighting tactics should be updated to reflect addition of this type of facility.
4. On page 6 of the Draft EA, under "Public and Occupational Health and Safety", it mentions that "the greatest potential hazard is a fire or explosion related to a leak or rupture at the facility or within the compressed tanks during shipping." Can you provide

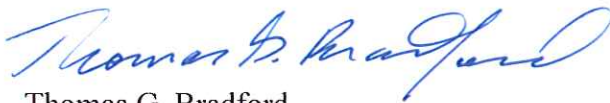


us with any instances of where this has occurred and what the consequences and impacts were to the surrounding areas?

5. On page 26 in Chapter 3 "Affected Environment and Environmental Consequences", Subsection 3.1.1.3 - Wetlands and Floodplains - they are using information from the 1982 FEMA flood maps. Our question is - have they evaluated the effect of the proposed changes in the new FEMA maps that are being adopted this year in Palm Beach County and all municipalities?
6. Based on the EA document it appears that no storage of hazardous/explosive materials is going to be at the site. Can this be confirmed?

We look forward to your efforts to address these issues and concerns so that we may intelligently provide the correct information to our citizens thus allaying any fears that may arise and allow the project to proceed.

Sincerely,



Thomas G. Bradford  
Town Manager

cc: Mayor and Town Council  
Jay Boodheshwar, Deputy Town Manager  
John Page, Director of Planning, Zoning and Building  
Kirk Blouin, Director of Public Safety  
Darrell Donato, Deputy Fire Chief  
William C. Bucklew, Building Official  
Brodie Atwater, Assistant Fire Chief  
Tim Pompos, Fire Marshal

**TOWN OF PALM BEACH**

**Town Manager's Office**

Post Office Box 2029 • 360 South County Road  
Palm Beach, Florida 33480



U.S. POSTAGE  PITNEY BOWES  
ZIP 33480 \$000.48<sup>0</sup>  
02 1W  
0001375127MAR 10 2015

Mr. Fred Pozzuto, NEPA Compliance Officer  
U. S. Department of Energy  
National Energy Technology Laboratory  
3610 Collins Ferry Road  
PO Box 880, Morgantown, WV 26507-0880

25505822853 0015



**From:** [Pozzuto, Fred](#)  
**To:** [Christopherson, Shawn](#)  
**Cc:** [CAYOQUETTE, ERIC \(Eric.Cayouette@emera.com\)](#); [Freeman, Carol](#); [Peterman, Kelley](#); [PMP Debra McLellan \(debra.mclellan@emera.com\)](#)  
**Subject:** RE: Fwd: Proposed Emera CNG Project  
**Date:** Thursday, June 04, 2015 1:18:16 PM

---

Shawn,

Thanks for your reply. The standard fending requirement is 3 feet from the face of the dock (*As per a previously agreed upon MOA the Port of Palm Beach has with the FLDER and I believe USF&WS*). The Emera Project is proposing a 5 foot fendering requirement above and beyond the 3-foot standard.

Thanks for your response. The Final EA is not quite complete so your comment should be able to be incorporated in the Agency Appendix of the final document.

Again, thank you for commenting on this EA.

*Fred Pozzuto, P.E., P.G.*

Environmental Manager / NEPA Compliance Officer  
Environmental Compliance Division  
DOE - National Energy Technology Laboratory  
O: 304-285-5219  
B: 304-719-1767  
C: 724-255-3637  
E: [fred.pozzuto@netl.doe.gov](mailto:fred.pozzuto@netl.doe.gov)

**From:** Christopherson, Shawn [mailto:[shawn\\_christopherson@fws.gov](mailto:shawn_christopherson@fws.gov)]  
**Sent:** Thursday, June 04, 2015 1:43 PM  
**To:** Pozzuto, Fred  
**Subject:** Re: Fwd: Proposed Emera CNG Project

Hello Fred,

My apologies for the late email on this project. I was going through some old files and stumbled across this project and realized I had not responded to the draft EA that was sent after my initial email on January 26, 2015. If it is still applicable the only comment that I would make refers to Page 32 under 3.2.1.4 West Indian Manatee:

Towards the end it says "The Port expects to add fenders..." I would change that to "The Port **will** add fenders..." since it is a requirement under the Palm Beach County MPP and considered a standard protection measure for docking of large vessels.

The Service has no other comments to provide at this time.

Thank you,  
Shawn

~~~~~  
Shawn Christopherson  
U.S. Fish and Wildlife Service  
1339 20th Street  
Vero Beach, Florida 32960  
Tel.: 772-469-4336  
Fax: 772-469-4336  
E-mail: [Shawn\\_Christopherson@fws.gov](mailto:Shawn_Christopherson@fws.gov)

On Mon, Jan 26, 2015 at 3:21 PM, Christopherson, Shawn <[shawn\\_christopherson@fws.gov](mailto:shawn_christopherson@fws.gov)> wrote:

Fred,

My initial concerns regarding the Emera project revolves around the potential for manatee mortality from the ocean-going carrier vessel. Specifically, the potential of a manatee to be crushed against the seawall by the carrier vessel. No discussion on the length, draft, hull shape, etc. of the carrier vessel has been provided. Assuming the hull is shaped such that it presents a hazard, the Service considers vessels at least 100 feet or longer a potential a hazard and in order to minimize any impact to manatee from being crushed, impact fenders would be required. In other words, if the vessel is shaped like a recreational vessel where there is more space at the waterline than the deck, then it is usually not a hazard. Or if the hull has a vertical face, but it is being moored to a cantilevered wharf or pile-supported deck, then it is usually not a hazard. The ones of most concern are vertical bulkhead wharves mooring ships with vertical hulls. The Service would recommend that fenders be employed on vessels such that when moored together or to a seawall, the fenders provide a three-foot standoff between the vessels or sea wall at maximum compression.

Additionally, I was discussing this project with another Service biologist and although there is no "official position" we do generally request that the NEPA document, address the upstream source of energy for the proposed project in the direct, indirect, and cumulative effects. This mostly applies to pipeline projects because once the pipe is complete there is generally more fracking in a shale play. Below is some suggested canned language that you may be able to use to address the cumulative effects in the NEPA documents, as well as a discussion on the source of product that will be moved.

**Suggested Canned Language when reviewing EA or EIS's for proposed FERC pipeline licenses:**

**Background:**

FERC sites natural gas pipelines under Section 7 of the Natural Gas Act, which gives authority to the commission for pipeline and storage regulation. Imports and exports fall under Section 3 of the same act. FERC approves construction for physical pipeline and storage facilities and works with the Department of Energy on permitting for new or expanding natural gas pipelines.

FERC regulates the engineering, environmental impact, accounting and transmission rates, and then the commission makes a recommendation based on

its review. Part of FERC's application analysis is the environmental review, which must comply with the National Environmental Policy Act (NEPA). FERC maintains that its license is limited to the construction and storage of what is being transported in the pipeline. However, the NEPA analysis associated with the license, should follow the NEPA guidelines and including an analysis of the cumulative effects of the increase capacity may have on development in a particular Shale Play. Discussed below is some example of typical language found in the NEPA document and some suggested language to respond to FERCs analysis.

#### **Example FERC language in cumulative effects section of the EA or EIS:**

- A more specific analysis of upstream facilities (Shale Play development) is outside the scope of this analysis because the exact location, scale, and timing of future facilities are unknown. In addition, the potential cumulative impacts of Shale drilling activities are not sufficiently casually related to the Project to warrant the comprehensive consideration of those impacts in this EA.

#### **FERC language found in the purpose and need section:**

- The purpose of the proposed pipeline will provide increase transport capacity (often described in dekatherms per day (Dth/d)). Often the NEPA document will reference a particular Shale Play that the pipeline will be moving gas from. Or it will include discussion if the pipeline will provide access to the "new emerging liquefied natural gas export and Gas-to-Liquids markets from Shale Play "X".

#### **Discussions:**

Because the "new emerging liquefied natural gas exports" is used to justify the project, it appears there is some understanding of how much the new upstream facilities will produced (dekatherms per day) of "new" natural gas will be extracted from the X Shale Development. Shale development is no longer a "new or emerging" field where the amount of gas from each well cannot be predicted with some level of certainty. In addition, years of data is also available to provide an estimate of the amount of water needed as well as the amount of waste water that will be produced from the additional source of capacity. Therefore, there should be a discussion of this included in the NEPA analysis.

#### **Proposed Standardize Language to be included when the Service comments on a FERC pipeline project:**

The Service believes that FERCs NEPA document should address the upstream source of liquefied natural gas for the proposed pipeline project in the direct, indirect, and cumulative impacts of the proposed action and alternatives. Service believes that proper consideration of the proposed action and connected actions may conclude that these impacts are significant and may require preparation of an EIS. CEQ NEPA regulations at 40 CFR 1508.25 direct federal agencies to

address three types of actions in the scope of EISs, including “connected actions,” such as those that “cannot or will not proceed unless other actions are taken previously or simultaneously.” The clearly stated purpose and need for the proposed pipeline is to transport an additional capacity of “X” (include dekatherms per day in purpose section) of natural gas extracted from the “X” Shale Formation. The facilities that will extract this gas will rely upon the pipeline to carry it to markets. The fact that the exact location, scale, and timing of the extraction facilities are presently unknown does not relieve FERC of the responsibility to address them as connected actions in its environmental analysis. The proposed route and capacity of the pipeline provides sufficient basis for a general analysis within “X” Shale Formation, of the probable number and distribution of wells that will supply the pipeline, from which FERC may estimate the quantities of water, clearing for pad and road construction, etc., that are likely to occur and the resulting impacts to environmental resources.

FERC is also responsible for determining whether its proposed action is likely, or not likely to adversely affect federally listed species and to comply accordingly with the inter-agency consultation regulations of the ESA based on these determinations. These determinations should consider activities that are interdependent with the proposed action, i.e., activities with no independent utility apart from the proposed action. The Service must address interdependent activities in either concurring with not-likely-to-adversely-affect findings or in evaluating likely-to-adversely-affect findings with a biological opinion. Upstream facilities supplying the proposed pipeline are interdependent activities. To ensure that the operators of such facilities comply with the ESA, FERC should use its authority as the federal action agency to require all applicants for a connection to the FERC-authorized pipeline to consult with the appropriate USFWS field office in advance of any well construction activity.

I look forward to seeing the draft EA when complete.

Regards,  
Shawn

~~~~~

Shawn Christopherson  
U.S. Fish and Wildlife Service  
1339 20th Street  
Vero Beach, Florida 32960  
Tel.: 772-469-4336  
Fax: 772-469-4336  
E-mail: [Shawn\\_Christopherson@fws.gov](mailto:Shawn_Christopherson@fws.gov)

On Mon, Jan 26, 2015 at 11:34 AM, Fred Pozzuto <[Fred.Pozzuto@netl.doe.gov](mailto:Fred.Pozzuto@netl.doe.gov)> wrote:

Thanks Shawn. I will still plan on sending you a hard copy of the Draft EA when it is ready (+- a month)

<><><><> FRED <><><><>

>>> "Christopherson, Shawn" <[shawn\\_christopherson@fws.gov](mailto:shawn_christopherson@fws.gov)> 1/26/2015 11:30 AM >>>  
Fred,

I am putting together the Services comments and will contact you if I have any additional questions.

Thanks,  
Shawn

~~~~~  
Shawn Christopherson  
U.S. Fish and Wildlife Service  
1339 20th Street  
Vero Beach, Florida 32960  
Tel.: 772-469-4336  
Fax: 772-469-4336  
E-mail: [Shawn\\_Christopherson@fws.gov](mailto:Shawn_Christopherson@fws.gov)

On Mon, Jan 26, 2015 at 11:22 AM, Fred Pozzuto <[Fred.Pozzuto@netl.doe.gov](mailto:Fred.Pozzuto@netl.doe.gov)> wrote:

Thank you. I haven't heard from Shawn yet, however, it would be best if Shawn called me tomorrow when I'm in my office, as I am working from home since we are in a blizzard up here in Western PA. Thanks.

***Fred E. Pozzuto, P.E., P.G.***  
Env. Mgr./NEPA Compliance Officer  
Environmental Compliance Division  
National Energy Technology Laboratory  
U.S. Department of Energy  
304-285-5219 Office  
304-719-1767 Blackberry  
724-255-3637 Cell

>>> "Hartley, Dana" <[dana\\_hartley@fws.gov](mailto:dana_hartley@fws.gov)> 1/26/2015 11:13 AM >>>  
**Dear Mr. Pozzuto,**

**I forwarded your request to Shawn Christopherson on 1/23. Shawn is cc-d on this email and has likely already been in touch.**

**Thank you, Dana**

Dana Hartley  
Endangered Species Supervisor  
U.S. Fish and Wildlife Service  
South Florida Ecological Services Office  
1339 20th Street  
Vero Beach, FL 32960  
Office: 772-469-4236  
Cell: 772-532-7293  
Fax: 772-562-4288  
Email: [Dana\\_Hartley@fws.gov](mailto:Dana_Hartley@fws.gov)

----- Forwarded message -----  
From: **Fred Pozzuto** <[Fred.Pozzuto@netl.doe.gov](mailto:Fred.Pozzuto@netl.doe.gov)>  
Date: Thu, Jan 22, 2015 at 3:55 PM  
Subject: Proposed Emera CNG Project

To: [dana\\_hartley@fws.gov](mailto:dana_hartley@fws.gov)

Dana,

I had sent to you (*and others at NOAA*) a letter along with some general informational drawings on October 15, 2014 (*See Attachments*) concerning the Emera Project. We (DOE) will have a completed Draft EA ready for public comment, hopefully by Mid-February.

Since this project has very little aquatic impacts other than one additional ocean barge leaving the Port of Palm Beach daily, I am inquiring if your office has given any consideration to my earlier pre-EA coordination letter of the 15th with a response.

If you would desire to discuss over the phone, please call my office at 304-285-5219. Thank you for your attention.

***Fred E. Pozzuto, P.E., P.G.***

Env. Mgr./NEPA Compliance Officer  
Environmental Compliance Division  
National Energy Technology Laboratory  
U.S. Department of Energy  
304-285-5219 Office  
304-719-1767 Blackberry  
724-255-3637 Cell



## **APPENDIX E**

### **Federal Energy Regulatory Commission (FERC) Order**

148 FERC ¶ 61,219  
UNITED STATES OF AMERICA  
FEDERAL ENERGY REGULATORY COMMISSION

Before Commissioners: Cheryl A. LaFleur, Chairman;  
Philip D. Moeller, Tony Clark,  
and Norman C. Bay.

Emera CNG, LLC

Docket No. CP14-114-000

ORDER ON PETITION FOR DECLARATORY ORDER

(Issued September 19, 2014)

1. On March 20, 2014, Emera CNG, LLC (Emera) filed a petition<sup>1</sup> requesting that the Commission declare that Emera's construction and operation of facilities to produce compressed natural gas (CNG) that will be transported by trucks to ships for export to the Commonwealth of the Bahamas will not be subject to the Commission's jurisdiction under the Natural Gas Act (NGA).<sup>2</sup>

2. For the reasons discussed herein, we grant the petition for a declaratory finding that Emera's proposed facilities and operations will not be subject to the Commission's jurisdiction under the NGA.

**I. Notice, Intervention, and Protest**

3. Notice of Emera's petition was published in the *Federal Register* on March 28, 2014.<sup>3</sup> Timely motions to intervene were filed by Floridian Natural Gas Storage Co., LLC (Floridian) and Pivotal LNG, Inc.<sup>4</sup> Floridian filed a protest, to which Emera submitted an answer. Although the Commission's Rules of Practice and Procedure do

---

<sup>1</sup> Emera's *Petition for a Declaratory Order (Petition)* was submitted pursuant to Rule 207 of the Commission's Rules of Practice and Procedure, 18 C.F.R. § 385.207 (2014).

<sup>2</sup> 15 U.S.C. § 717, *et seq.* (2012).

<sup>3</sup> 79 Fed. Reg. 17,528 (Mar. 28, 2014).

<sup>4</sup> Pivotal LNG's timely, unopposed motion to intervene was granted by operation of Rule 214 of the Commission's Rules of Practice and Procedure. 18 C.F.R. § 385.214 (2014).

not permit answers to protests,<sup>5</sup> we find good cause to waive this rule to admit the answer, as doing so will not cause undue delay at this stage of the proceeding and information in the pleading will assist in the decision-making process.

4. Floridian has been granted certificate authorization under NGA section 7 to construct storage, liquefaction, revaporization, and liquefied natural gas (LNG) truck-loading facilities in Florida at a location approximately 35 miles from the contemplated site for Emera's planned CNG and truck-loading facilities.<sup>6</sup> Floridian argues that the Commission's assertion of jurisdiction over Emera's CNG facilities is necessary to ensure that Emera's operations are "environmentally-sound, as well as safe and secure," and to prevent a regulatory gap that would give Emera an unfair competitive advantage.<sup>7</sup> Emera argues that Floridian does not have an interest justifying its participation in this proceeding, since it will not be a consumer of CNG or a customer of Emera, and Floridian's LNG operations will not be in direct competition with Emera's CNG operations, since LNG is not a substitute for CNG.<sup>8</sup>

---

<sup>5</sup> Rule 213(a)(2), 18 C.F.R. § 385.213(a)(2) (2014).

<sup>6</sup> *See Floridian*, 124 FERC ¶ 61,214 (2008) (order granting certificate), and 140 FERC ¶ 61,167 (2012) (order amending certificate). Floridian will receive its storage customers' gas from interconnections with two interstate pipelines and liquefy the gas for storage as LNG. Although Floridian's facilities will include LNG truck-loading equipment, most of the LNG in storage will be revaporized and reinjected directly into the interstate pipeline grid. On August 15, 2013, the Commission issued a letter order granting Floridian an extension until August 29, 2014, to complete construction and make its authorized facilities available for service. *See* August 15, 2013 letter order issued in Docket No. CP08-13-000 by the Director of the Division of Pipeline Certificates, Office of Energy Projects. On September 4, 2013, Floridian filed an application to amend its existing authorization to modify its facilities by substituting a 1 Bcf storage tank for the initially planned 4 Bcf tank and reducing the associated vaporization. That application is pending. On August 7, 2014, Floridian filed a request for a further extension of time, which was granted on August 11, 2014, providing Floridian until August 29, 2015, to complete construction of its authorized facilities and make them available for service.

<sup>7</sup> Floridian's April 18, 2014 Motion to Intervene at 10.

<sup>8</sup> Rule 214 provides the right to participate in a proceeding to a person that "has or represents an interest which may be directly affected by the outcome of the proceeding." 18 C.F.R. § 385.214(b)(ii) (2014).

5. We find that Floridian has demonstrated an interest sufficient to allow its participation as a party in this proceeding. Accordingly, Floridian's motion to intervene is granted.

## **II. Emera's Petition for a Declaratory Order**

6. Emera<sup>9</sup> proposes to construct a CNG compression and truck-loading facility at the existing Port of Palm Beach in Riviera Beach, Florida, in order to export CNG to the Commonwealth of the Bahamas. Emera states that it has filed an application with the Department of Energy (DOE) for authorization to export CNG.<sup>10</sup> Emera plans to receive natural gas at its planned compression facility from the Riviera Lateral, a pipeline owned and operated by Peninsula Pipeline Company.<sup>11</sup> Emera comments that although the

---

<sup>9</sup> Emera is a limited liability company, formed under the laws of Delaware, with its primary place of business in West Palm Beach, Florida. Emera is a wholly owned, indirect subsidiary of Emera Inc., which is a Canadian corporation.

<sup>10</sup> Emera filed its application for export authorization with DOE's Office of Fossil Energy (FE) on November 20, 2013, seeking long-term authorization to export CNG to both free trade and non-free trade countries, which was granted on June 13, 2014, in DOE/FE Order No. 3447. The Department of Energy issued a notice of the application in the *Federal Register* on July 3, 2014. 79 Fed. Reg. 38,017. Section 301 of the Department of Energy Organization Act of 1977 transferred the regulatory functions of NGA section 3 from the Federal Power Commission (this Commission's predecessor) to the Secretary of Energy. DOE Organization Act, 42 U.S.C. § 7151 (2012). The Secretary subsequently delegated back to the Commission the authority over the siting, construction, and operation of gas import and export facilities. Specifically, the Commission has been delegated section 3 authority to "approve or disapprove the construction and operation of particular facilities, the site at which such facilities shall be located, and with respect to natural gas that involves the construction of new domestic facilities, the place of entry for imports or exit for exports." The Commission's current delegated authority over section 3 functions is provided by DOE Delegation Order No. 00-004.00A, which was effective May 16, 2006. Applications for authorization to import or export natural gas (the commodity) must be submitted to DOE.

<sup>11</sup> Emera's petition indicates that Peninsula Pipeline Company operates as a "Hinshaw pipeline company," exempt pursuant to NGA section 1(c) from the Commission's jurisdiction over the interstate transportation and sale for resale of natural gas. NGA section 1(c), added in 1954, Pub. L. 323, 83rd Cong., 2nd. Sess. (1954), is referred to as the "Hinshaw amendment" because section 1(c)'s exemption was sponsored by Representative Carl Hinshaw of California. *See House of Representatives Hearing Before a Subcommittee of the Committee on Interstate and Foreign Commerce*

(continued...)

described CNG facility would be the principal source of its CNG for export, during maintenance at its facility or at the Port of Palm Beach, Emera may obtain CNG from other sources and/or export CNG via other general-use Florida port facilities.

7. Emera's CNG plant would include facilities to receive, dehydrate, and compress gas to fill International Standards Organization (ISO) containers and load the ISO containers onto trucks. Emera states that the proposed CNG facility would initially be capable of loading 6 million cubic feet per day (MMcf/d) of CNG into ISO containers and would be capable of expanding to load up to 25 MMcf/d. Emera plans to truck the ISO containers a distance of approximately a quarter mile from its proposed CNG facility to a berth at the Port of Palm Beach where the containers will be loaded onto a roll-on/roll-off ocean-going carrier.

8. Emera states that it intends to send CNG containers from Florida to Freeport, Grand Bahama Island, where the containers would be unloaded, the CNG decompressed and injected into a pipeline for transport to electric generation plants owned and operated by Grand Bahama Power Company (Bahama Power), an Emera affiliate.<sup>12</sup> Bahama Power's electric generation plants currently are powered by heavy fuel oil and diesel. In addition to diversifying Bahama Power's fuel sources, Emera expects that retrofitting the plants to burn natural gas will reduce and stabilize customer electricity rates and stimulate economic growth in the Bahamas. Emera also plans to market its CNG to other customers that are able to access the pipeline on Grand Bahama Island.

### **III. Response**

9. As discussed below, we find that the construction and operation of the CNG facility described by Emera will not be subject to our authority under the NGA.

#### **A. NGA Section 3 Authority over Emera's Facility**

10. While the stated purpose of Emera's CNG facility will be to compress gas so that it can be exported in ISO containers, the facility will be subject to our section 3 jurisdiction only if we find it will be an "export facility." Floridian argues that Emera's

---

*on H.R. 5976*, at 19-28, June 29, 1953, 83rd Congress, 1st Sess. (H.R. 5976), Reproduced in *Natural Gas Act, Legislative History* (Roach, F. and Gallagher, W.), Vol. II, at 23 (1968). The Hinshaw amendment exempts from Commission jurisdiction a qualifying pipeline company's transportation and sales for resale of interstate gas supplies that will be consumed within the state but that do not qualify as local distribution – e.g., deliveries of system supplies to a local distribution company.

<sup>12</sup> Emera owns 80.4 percent of Bahama Power.

facility will constitute a jurisdictional natural gas export facility, and thus, its siting, construction, and operation are subject to the Commission's jurisdiction.

11. In support of its position, Floridian emphasizes that section 1(b) provides that the NGA applies not only "to the importation and exportation of natural gas in foreign commerce" but also to "persons engaged in such importation or exportation," pointing to the fact that Emera will be operating its CNG facility to implement its exports. While Floridian acknowledges that the Commission has no jurisdiction over the truck traffic between the CNG facility and the site where ISO containers will be transferred to and from ocean-going carriers, Floridian disputes Emera's position that this quarter-mile transit by truck should prevent section 3 jurisdiction from attaching to Emera's CNG facility as an export facility, given Floridian's point of view that the point of export is the Port of Palm Beach. Floridian further asserts that Emera's facility will be subject to the Commission's exclusive jurisdiction under section 3 as an "LNG terminal," as that term was defined by the Energy Policy Act of 2005 (EPAcT 2005).<sup>13</sup>

12. Floridian asserts that failure by the Commission to assert jurisdiction over Emera's facility will give operators like Emera an unfair competitive advantage over companies subject to the Commission's jurisdiction. Floridian also charges that the public interest

---

<sup>13</sup> Pub. L. No. 109-58, 119 Stat. 594 (2005). EPAcT 2005 added NGA section 2(11) to define "LNG Terminal" as follows:

"LNG Terminal" includes all natural gas facilities located onshore or in State waters that are used to receive, unload, load, store, transport, gasify, liquefy, or process natural gas that is imported to the United States from a foreign country, exported to a foreign country from the United States, or transported in interstate commerce by waterborne vessel, but does not include –

(A) waterborne vessels used to deliver natural gas to or from any such facilities; or

(B) any pipeline or storage facility subject to the jurisdiction of the Commission under section 7.

In addition, EPAcT 2005 added section 3(e)(1) to provide that "[t]he Commission shall have the exclusive authority to approve or deny an application for the siting, construction, expansion, or operation of an LNG terminal."

requires that the Commission ensure that natural gas facilities are constructed and operated in an environmentally-sound, safe and secure manner.<sup>14</sup>

13. The Commission has interpreted and exercised its delegated section 3 jurisdiction over import and export facilities consistent with its interpretation and exercise of its section 7 jurisdiction over facilities used to transport gas in interstate commerce. The Commission has found that its section 7 jurisdiction over interstate transportation is limited to the transportation of gas by pipeline.<sup>15</sup> Similarly, to date, the Commission has only exercised its authority under section 3 over import and export facilities to regulate: (1) pipelines that transport natural gas to or from the United States' international borders; and (2) coastal LNG terminals that are accessible to ocean-going LNG tankers and connected to pipelines that deliver gas to or take gas away from the terminal. Emera's facility will not include a pipeline to deliver gas to an international border or be capable of transferring CNG directly into an ocean-going carrier for export. Thus, we find that Emera's facilities to compress and load CNG onto trucks are unlike the border-crossing pipelines and coastal LNG terminals that the Commission traditionally has regulated

---

<sup>14</sup> Floridian's *Motion for Leave to Intervene and Comments* at 10.

<sup>15</sup> See *Exemption of Certain Transp. and/or Sales of LNG from the Requirements of Section 7(c) of the NGA*, 49 F.P.C. 1078, at 1079 (1973). In this order terminating a rulemaking proceeding, the Commission concluded from legislative history and statutory construction that the Commission does not have section 7 jurisdiction over gas being moved by non-pipeline modes of transportation because Congress enacted the NGA specifically to address *pipeline*-related abuses. However, the Commission has asserted jurisdiction over facilities used to liquefy or compress gas for delivery by non-pipeline modes of transportation where necessary to prevent circumvention of the Commission's jurisdiction over the interstate transportation of gas by pipeline. For example, in *Wisconsin Gas Company*, 53 FPC 2198 (1975), the Commission asserted section 7 jurisdiction over an LDC's liquefaction facility because it was being used to load trucks with LNG for delivery to an affiliated LDC to implement an exchange arrangement involving the displacement of gas moving on an interstate pipeline and a jurisdictional sale for resale. Similarly, in *Natural Gas Company*, 55 FPC 919 (1976), the Commission asserted section 7 jurisdiction over an exchange arrangement where an LDC purchasing gas from an interstate pipeline had the interstate pipeline deliver its gas to another LDC that liquefied the gas and redelivered it as LNG by truck. In both these cases, although the Commission found that trucking LNG effectively substituted for flowing gas by pipeline, the Commission did not seek to assert jurisdiction over the trucking operations.

under section 3 as import/export facilities, and more like existing, unregulated facilities that deliver LNG into trucks which are subsequently driven across the border into Canada or Mexico.<sup>16</sup>

14. Further, we reject Floridian's contention that we should interpret NGA section 2(11)'s definition of LNG terminal to include Emera's planned CNG facility. While it is true that Emera's facility will be "located onshore" and "used to receive, . . . load, . . . transport, . . . or process natural gas that is . . . exported to a foreign country," Floridian would have us read "LNG" out of the term "LNG terminal." Floridian's efforts to draw parallels between Emera's proposed CNG facility and LNG terminals are unavailing, as the capabilities of Emera's CNG facility will be confined to compressing, and not liquefying, natural gas. Floridian provides no evidence of any expression of Congressional intent that the EAct 2005 revisions to NGA section 3 should apply to facilities that produce or transport natural gas in other than a liquid state.

15. Floridian argues that the Commission's failure to assert jurisdiction over Emera's facilities and services will result in a regulatory gap that will give Emera and other companies engaged in similar operations an unfair competitive advantage over companies like Floridian, whose facilities and services, including their LNG truck-loading services, are subject to the Commission's regulatory authority. Floridian argues that this regulatory gap would be contrary to the public interest because Emera will be able to construct and operate its CNG facility without being subject to the Commission's prior environmental and safety review.

16. We observe, as the court explained in *ExxonMobil Gas Marketing Company v. FERC*, the "need for regulation cannot alone create authority to regulate," and "jurisdiction may not be presumed based solely on the fact that there is not an express withholding of jurisdiction."<sup>17</sup> We further note that the fact that this Commission does

---

<sup>16</sup> For example, Xpress Natural Gas (XNG) has a CNG plant in Maine that receives gas from an interstate pipeline and loads CNG containers onto trucks for delivery to customers in Canada and in New England. The Commission does not regulate the CNG facility under either section 3 or 7, nor does it exercise jurisdiction over the trucks' passage across the border under section 3. Further, the Commission has never issued authorization under section 3 to designate points of import or export for gas carried by truck, train, or waterborne vessel or authorized the site of, or construction and operation of, any complementary facility, such as a road, bridge, railway, or stand-alone pier, needed to import or export gas by a non-pipeline mode of transportation. However, regardless how natural gas is transported, all imports and exports of natural gas require section 3 authorization from the DOE's Office of Fossil Energy.

<sup>17</sup> 297 F.3d 1071, 1088 (D.C. Cir. 2002).



not have NGA jurisdiction over Emera's CNG facility does not mean that other federal, state, and local regulatory agencies lack the authority to impose environmental and safety conditions on the construction and operation of Emera's CNG facility. Emera's facility, the pipeline delivering the gas, and the trucking operations will be subject to the U.S. Department of Transportation's (DOT) regulations and requirements addressing the transportation and storage of hazardous materials.<sup>18</sup> The ships carrying the CNG containers and docks at the ports where the containers will be loaded on to the ships will be subject to the U. S. Coast Guard's requirements and restrictions. The port authorities also will exercise oversight. In addition, the facilities and activities involved in Emera's export operations will be subject to regulations and requirements of the U.S. Environmental Protection Agency under its various enabling statutes, including the Clean Water Act, Clean Air Act, and the Hazardous Materials Transportation Act.

17. We have found that Emera's planned facilities and operations will not be subject to our NGA jurisdiction. Therefore, we have no more ability to address Floridian's perceived unfair competition to its jurisdictional LNG trucking-loading operations for its storage customers than we would if Floridian were facing competition from a distributor of propane or fuel oil over which we similarly have no jurisdiction.<sup>19</sup>

18. Given this, we reject Floridian's claim that Emera will inhabit a regulatory gap; rather, we view Floridian and Emera as operating different types of facilities, each subject to different (and in part, overlapping) regulatory regimes.<sup>20</sup>

---

<sup>18</sup> DOT's regulations are set forth in Title 49 of the U.S. Code of Federal Regulations. DOT's Office of Hazardous Materials Safety develops and coordinates implementation of hazardous materials regulations with DOT's various operating administrations, including the Office of Pipeline Safety, Federal Highway Administration, and Federal Railroad Administration.

<sup>19</sup> We note that in issuing Floridian's section 7 certificate, Floridian sought and the Commission granted market-based rate authority, based in part on the existence of numerous competitors serving the same region, which should preclude Floridian from wielding significant market power. 124 FERC ¶ 61,214 at PP 24-33.

<sup>20</sup> While Emera will not be subject to our oversight, it may need to comply with requirements imposed by, among others, the United States Department of Transportation's Pipeline and Hazardous Materials Administration and Federal Motor Carrier Safety Administration, the United States Coast Guard, the Florida Public Service Commission, the Florida Bureau of Fire Prevention, and the Port of Palm Beach District.

**B. NGA Section 7 Authority over Gas in Interstate Commerce**

19. Emera also requests that the Commission declare that the proposed facilities will not be subject to its authority under section 7 of the NGA. As presented in its petition, all of the natural gas to be compressed at Emera's planned facility will be exported in foreign commerce to the Commonwealth of the Bahamas. Thus, on its face it seems that the Commission's section 7 jurisdiction over transportation and sales of gas for resale in interstate commerce would not be implicated by Emera's proposal. Further, gas compressed at Emera's facility will not be loaded directly onto ships for export. Rather, Emera will compress gas into containers which will be moved by truck to a dock where the containers will be loaded onto a ship for export. It is well settled that the Commission's jurisdiction over transportation and sales in interstate commerce only applies to gas that is transported by pipeline.<sup>21</sup> Moreover, as noted above, Emera will be receiving its gas from a non-jurisdictional Hinshaw pipeline. Since the gas will have left jurisdictional interstate commerce before reaching Emera and will never re-enter interstate commerce (i.e., will not be transported from Florida to another state), our section 7 jurisdiction will not attach to the Emera facility.

20. In view of the above considerations, we find that Emera's CNG facilities and services will not be subject to the Commission's jurisdiction under NGA section 3 as a

---

<sup>21</sup> See *Order Terminating Proposed Rulemaking Proceeding*, 49 FPC 1078, 1081 (1973). The Commission has declined on several occasions to exercise jurisdiction over the movement of LNG by non-pipeline modes of transportation. See *Marathon Oil Company (Marathon)*, 53 FPC 2164, at 2175 (1975), where in response to contentions that it should find that section 7 jurisdiction would apply to the tankers that would transport LNG from Alaska to Oregon because "pipeline" is only mentioned once in the NGA (in section 7(h)), the Commission pointed out that "Section 7 is phrased in terms of 'extend,' 'physical connection,' 'abandon,' and 'construct,' all of which relate to stationary, not movable, facilities." See also *Southern LNG Inc.*, 131 FERC ¶ 61,155 (2010) and *New England LNG Co., Inc.*, 49 FPC 1460 (1973) (transportation of LNG by truck); *Distrigas of Massachusetts Corporation*, 55 FPC 3121 (1976) (transportation of LNG by barge and truck); and *Wisconsin Gas Company*, 53 FPC 2198 (1975) (transportation of LNG by truck). Although the cited decisions address gas in a liquid state, the Commission's reasoning is equally applicable to gas vapor, e.g., CNG, being moved by a non-pipeline mode of transportation.

natural gas export facility or as an LNG terminal, or under section 7 as a facility used to transport gas or as an entity making sales for resale of gas in interstate commerce.<sup>22</sup>

The Commission orders:

(A) Emera's petition for a declaratory finding that its proposed CNG facilities and export operations will not be subject to the Commission's jurisdiction under the NGA is granted.

(B) Floridian's motion to intervene is granted.

By the Commission. Commissioner Bay is dissenting with a separate statement attached.

( S E A L )

Nathaniel J. Davis, Sr.,  
Deputy Secretary.

---

<sup>22</sup> Emera states that during periods of maintenance at either its CNG facility or the Port of Palm Beach, it may have CNG from other sources delivered by trucks to the Port of Palm Beach or to general-use docks at other Florida ports. To the extent that these alternative arrangements conform to Emera's description of its planned facilities and services at the Port of Palm Beach – e.g., gas will be received in state from an NGA-exempt facility, compressed and transported exclusively by truck in state, sold once to a foreign entity, and exported from a general-use dock – then the conclusions we reach with respect to Emera's planned CNG operations will apply to its potential alternative CNG operations. With respect to using other ports as points of export (Emera identifies Port Everglades, the Port of Miami, Port Canaveral, and the Port of Jacksonville as possible candidates), doing so will not subject these general-use facilities to our jurisdiction under NGA section 3. We found in *The Gas Company, LLC*, 142 FERC ¶ 61,036, at P 14 (2013), that general-use pier facilities would not become section 3 jurisdictional LNG terminal facilities if used for ISO containers of LNG because “[w]e do not believe these pier facilities constitute ‘natural gas facilities’ as that term is used in the section 2(11) definition [of LNG terminal].” We similarly find that using general purpose ports to handle ISO containers of CNG will not cause the port facilities to become jurisdictional natural gas export facilities subject to our section 3 jurisdiction.

UNITED STATES OF AMERICA  
FEDERAL ENERGY REGULATORY COMMISSION

Emera CNG, Inc.

Docket No. CP14-114-000

(Issued September 19, 2014)

BAY, Commissioner, *dissenting*:

In enacting the Natural Gas Act, Congress emphasized the importance of regulating the sale of gas in foreign commerce. In section 1(a), Congress declared that “Federal regulation in matters relating to the transportation of natural gas and the sale thereof in interstate and foreign commerce is necessary in the public interest.” 15 U.S.C. § 717(a). In section 1(b), Congress stated that the provisions of the Act “shall” apply to “the importation or exportation of natural gas in foreign commerce and to persons engaged in such importation or exportation.” *Id.* § 717(b). If there were any lingering doubt over congressional intent, section 3 removes it when the Act refers to foreign commerce a third time: “[N]o 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.” *Id.* § 717b(a). As a result, the Commission exercises authority over the siting, construction, operation, and maintenance of export facilities in order to ensure that any authorized exports will serve the public interest. *See, e.g., NET Mex. Pipeline Partners, LLC*, 145 FERC ¶ 61,112, P 13 (2013).

Here, Emera’s facilities fall within the four corners of the statute. They are facilities involving natural gas intended for export to a foreign country. As the majority acknowledges, “the stated purpose of Emera’s CNG facility will be to compress gas so that it can be exported in ISO containers” to the Commonwealth of the Bahamas. Order P 10. Not surprisingly, perhaps, Emera has applied to the Department of Energy— under section 3 of the Natural Gas Act — “for long-term authorization to export CNG from” its proposed facility, and properly so. *See* 79 Fed. Reg. 38,017, 38,018 (July 3, 2014). Yet, in the majority’s view, that very same facility is not an “export facility” under section 3.

Of course, this raises the question of how what would plainly appear to be a gas export facility is not, in fact, an export facility. The majority’s argument seems to be that because the CNG will leave Emera’s facility by truck and travel a quarter of mile before being loaded onto ocean-going carriers for export — rather than by a pipeline running across a border or to a tanker — the facility is not an “export facility” under section 3 of the Natural Gas Act. *Id.* P 13. It cannot be that the Commission’s jurisdiction turns on this 440-yard truck journey.

The majority suggests that the scope of the Commission's jurisdiction under section 3 must be consistent with section 7 of the Natural Gas Act. Jurisdictional export facilities – other than “LNG terminals” – thus must have the defining characteristic of interstate transportation facilities, namely a send-out pipeline. Order P 13. But conflating section 3 with section 7 is not supported by the language of the statute. Section 7 speaks of natural gas “transportation facilities,” 15 U.S.C. § 717f; section 3 does not, *id.* § 717b. And none of the language which led the Commission to conclude that section 7 is limited to transportation by pipelines is present in section 3 (nor any of the related delegation and executive orders). *See, e.g., Exemption of Certain Transp. and/or Sales of LNG from the Requirements of Section 7(c) of the NGA*, 49 F.P.C. 1078, 1079-80 (1973) (discussing Commission's section 7 jurisdiction). Moreover, section 1(b) demonstrates the breadth of the Act by making a distinction between interstate transportation or sales on the one hand, and importation and exportation on the other, all of which are covered. *See* 15 U.S.C. § 717(b) (applying the Act to “natural gas companies engaged in such transportation or sale, and to the importation or exportation of natural gas in foreign commerce and to persons engaged in such importation or exportation”) (emphasis added).

The result reached by the majority also suggests that, if the boundaries of a facility do not encompass the actual point of export, it cannot be an “export facility” under section 3. But the Department of Energy Delegation Order providing the Commission with authority over export facilities differentiates between the place of export and the facilities necessary to implement that export, and gives no indication that the former must be located within the latter. *See* DOE Delegation Order No. 00-004.00A, at ¶ 1.21.A (delegating to FERC, with respect to “the imports and exports of natural gas,” the authority to “[a]pprove or disapprove the construction and operation of particular facilities, the site at which such facilities shall be located, and with respect to natural gas that involves the construction of new domestic facilities, the place of entry for imports or exit for exports”).

As a policy matter, one could certainly debate the merits of whether or not FERC should assert jurisdiction over Emera's export facility. But where Congress has spoken there is no room for such a debate. Here, Congress's intent is clear: federal regulation over the sale of gas in foreign commerce “is necessary in the public interest.” 15 U.S.C. § 717(a).

That Congress might require federal oversight of foreign commerce should not be a surprise. *See, e.g., Michelin Tire Corp. v. Wages*, 423 U.S. 276, 285 (1976) (“the Federal Government must speak with one voice when regulating commercial relations with foreign governments”). The Commission itself has previously recognized that “[t]he nation's energy needs are best served by a uniform national policy” applicable to the export or import of natural gas in foreign commerce. *Sound Energy Solutions*, 106 FERC ¶ 61,279, P 27 (2004). The Commission's ability to implement any such national policy may now be subject to the vagaries of where an exporter chooses to put the fence around its facility or by the trucking of gas a short distance to the docks.

In my view, regardless of the manner in which the CNG leaves Emera's plant, the facility should be called what it is: a natural gas export facility. Accordingly, I respectfully dissent from the determination that Emera's facilities are not subject to the Commission's jurisdiction under section 3 of the Natural Gas Act.

---

Norman C. Bay  
Commissioner

## **APPENDIX F**

### **Public Comments**

## **Appendix F**

### **Public Comments received during the 30-day Public Comment Period on the Draft Environmental Assessment for the Emera CNG, LLC Compressed Natural Gas Project, Port of Palm Beach, City of Rivera Beach, Palm Beach County, Florida**

The official 30-day public comment period began on 13 February 2015 when the Draft Environmental Assessment (EA) was made available to the public on the DOE National Energy Technology Laboratory website and DOE's NEPA website. The Draft EA was also available at the Riviera Beach Public Library. The public had the opportunity to submit comments or questions via email, or mail through 18 March 2015. Under the federal Coastal Zone Management Act (15 C.F.R. § 930.41), the Florida State Clearinghouse has 60 days from receipt of the document (14 April 2015) to comment on proposed federal actions. All comments were reviewed and those pertinent to the EA are summarized below. Every attempt has been made to adequately respond to these comments and incorporate them into the final EA as appropriate. Late comments were accepted to the extent practicable.

A total of 58 comments were received from 7 agencies during the comment period. Comments are arranged in a similar order to which the related resource areas or topics are presented in the EA. No comments were received from the U.S. Army Corps of Engineers, U.S. Coast Guard, NOAA National Marine Service, Federal Emergency Management Agency (FEMA), U.S. Environmental Protection Agency (EPA), Region 4, Seminole Tribe of Florida, or Seminole Nation of Oklahoma. No Comments were received from individual concerned citizens.

---

#### **Environmental Resource Areas with No, Negligible, or Temporary Impacts**

##### **COMMENT 1:**

*Aesthetics and Visual Resources:* Port activities that predated residential uses were smaller in scale and had little to no potential to negatively impact the health, safety and welfare of the residents in the area, especially in comparison to the use currently proposed. Though the EA states that the Port educates adjacent communities on the importance of commerce and the role of the port in the community to better integrate itself with adjacent areas, there seems to be little to no educational material provided or education process occurring currently.

##### **RESPONSE:**

Based on a review of the Port's website, interested parties can sign up to receive information on planned and future activities at the Port including the berthing calendar and obtain access to



Commission and Board meeting minutes and agendas in order to become more involved with routine Port activities.

COMMENT 2:

*Aesthetics and Visual Resources:* Additional cargo ships that would be required to ship CNG according to this proposal would have a visual impact on the area.

RESPONSE:

The addition of one vessel per day at the port would be considered within the range of normal operational ship traffic and would not cause additional visual impacts to the area.

COMMENT 3:

*Land Use:* There is insufficient discussion of the requirements for adherence to the Port of Palm Beach's Master Plan, Palm Beach County's Comprehensive Plan, the City of Riviera Beach's Comprehensive Plan, the City's Code of Ordinances, and the City's Land Development Regulations.

RESPONSE:

The proposed project is consistent with the Port of Palm Beach's Master Plan. The Port itself has been a pre-existing commercial activity dating back to 1917. The Port's Master Plan is a reference through multiple sections of the EA.

The proposed project would be consistent with Palm Beach County's Comprehensive Plan. The proposed action constitutes industrial development within a designated industrial area. Palm Beach County has incorporated the Port's Master Plan into the County Comprehensive Plan, though it may not "subscribe to all its findings and recommendations" (Palm Beach County Comprehensive Plan, page 3-TE, available at: <http://www.co.palm-beach.fl.us/pzb/planning/comprehensiveplan/tableofcontent.htm>). Palm Beach County states in their Comprehensive Plan that they "shall continuously seek to achieve consistency and coordination" with the Port's Master Plan (Palm Beach County Comprehensive Plan, page 16-CM).

The proposed project would be consistent with the City of Riviera Beach's Comprehensive Plan, Code of Ordinances, Redevelopment Plan, and Land Development Regulations. The proposed action would not result in an expansion of the Port, would be in compliance with the Port's existing agreements with the City, and would not adversely impact downtown redevelopment, traffic, or residential areas. The proposed project would be consistent with the current and future zoning of the Port area. The Port of Palm Beach area is currently zoned "General Industrial District"

according to the Official Zoning Map of the City of Riviera Beach (available at: [http://www.rivierabch.com/filestorage/305/307/1035/1039/Official\\_Zoning\\_Map.pdf](http://www.rivierabch.com/filestorage/305/307/1035/1039/Official_Zoning_Map.pdf)). It is zoned as “Port” on the Future Land Use Map of the City of Riviera Beach (available at: [http://www.rivierabch.com/filestorage/305/307/1035/1039/Official\\_Future\\_Land\\_Use\\_Map.pdf](http://www.rivierabch.com/filestorage/305/307/1035/1039/Official_Future_Land_Use_Map.pdf)).

COMMENT 4:

*Community services:* How was the assessment made that the project demand would not exceed the available capacity of existing services determined without consulting the City of Riviera Beach’s police and fire/EMS agencies?

RESPONSE:

Risks are being managed to minimize the utilization of these services. A review of the Pipeline and Hazardous Materials Safety Administration (PHMSA) database for incident reports in the United States involving compressed natural gas over the last ten (10) years was conducted. Two reports were identified: 1-2014080058 and 1-2005091036, respectively. The first incident resulted in an explosion and fire from a high impact accident on a highway. The second incident resulted in a fire but there was no explosion. This demonstrates that the potential risk of an incident is low.

The transportation of gas by pipeline and vessel is safeguarded through many layers of protection designed to prevent and mitigate the consequences of incidents. These layers of protection begin with established and proven methods of design, manufacturing, and construction standards. They also include regulatory requirements to monitor, inspect, maintain, and protect delivery equipment. Emera would also develop and maintain health, safety, security, and environmental management practices, operations procedures, and emergency response and management plans to assure the integrity and safe operation of the proposed CNG facility and transport vessel. They would also document that personnel working at the facility or manning the transport vessel are trained and qualified to perform the work, recognize abnormal conditions, and respond appropriately to protect life and property.

With these measures in place, the project would not be anticipated to place an undue burden on existing City of Riviera Beach or Palm Beach County emergency services. Emera’s Emergency Response Plan will identify resources required for various emergency response activities and could include local emergency response services, contractors and station employees. This plan for a coordinated effort will be developed in consultation with local emergency response departments.

COMMENT 5:

*Noise and vibration:* Anticipated decibel levels associated with operation of the facility and hours of operation are not provided to be able to adequately assess potential impacts.

RESPONSE:

Noise levels associated with the CNG facility would be anticipated to be approximately 80 dBA at a distance of 10 feet and below 65 dBA at a distance of 100 feet. The City of Riviera Beach ordinances for sound levels for fixed mechanical equipment in industrial properties are 65 dBA at the property boundary. The CNG facility is located more than 300 feet from the Port of Palm Beach boundary, therefore noise levels for the CNG facility would be below both the industrial and residential City ordinances. This information has been added to Table 1.1-1 in the Noise and Vibration section. The facility's expected hours of operation are between approximately 10 am and 2 am under normal conditions, with the exact time of the day to be determined after discussion with Harbor Masters, pilots and customs officials in both Palm Beach and Freeport.

COMMENT 6:

*Transportation:* The proposed shipping route would pass by residential and publically accessible recreational areas. What would the potential blast radius be if a catastrophe occurred prior to a full ship leaving the Port of Palm Beach inlet? The proposal also requests transportation of CNG to and from other locations as desired by the applicant. Environmental impacts from this could be tremendous in a worst case scenario.

RESPONSE:

Natural gas has a high ignition temperature, about 1,200° Fahrenheit, compared with about 600° Fahrenheit for gasoline. It also has a narrow range of flammability, that is, in concentrations in air below about 5% and above about 15%, natural gas will not burn. The high ignition temperature, limited flammability range and rapid dissipation make accidental ignition or combustion of natural gas unlikely.

Additionally, it is generally accepted that outdoor natural gas has a low risk of explosion. Natural gas has a low reactivity and tests show the risk of a vapor cloud explosion to be lower than for other common hydrocarbons. As described above, natural gas also has low flammability. The U.S. Nuclear Regulatory Commission 2009 report "Comparison of Blast Pressures and Effects Methodologies with Application to South Texas Units 3 & 4" concludes that the potential for an outdoor natural gas vapor cloud explosion is "beyond the scope of a worst credible case scenario" (page 29).

Natural gas containers will be sealed, to prevent spills and evaporative losses. The design of natural gas containers is subjected to a number of federally required "severe abuse" tests, such as heat and pressure extremes, gunfire, collisions and fires. Such tests are required to ensure the containers meet federally regulated standards or integrity/stability (49 CFR 571.304). If a leak were to occur,

the natural gas would dissipate rapidly into the atmosphere because it is lighter than air if it is accidentally released.

A review of the Pipeline and Hazardous Materials Safety Administration (PHMSA) database for incident reports involving compressed natural gas in the United States over the last ten (10) years was conducted. Two PHMSA reports were identified: 1-2014080058 and 1-2005091036, respectively. The first incident resulted in an explosion and fire from a high impact accident on a highway. The second incident resulted in a fire but there was no explosion.

The transportation of gas by pipeline and vessel is safeguarded through many layers of protection designed to prevent and mitigate the consequences of incidents. These layers of protection begin with established and proven methods of design, manufacturing, and construction standards. They also include regulatory requirements to monitor, inspect, maintain, and protect delivery equipment. Emera would develop and maintain health, safety, security, and environmental management practices, operations procedures, and emergency response and management plans to assure the integrity and safe operation of the proposed CNG facility and transport vessel. They would also document that personnel working at the facility or manning the transport vessel are trained and qualified to perform the work, recognize abnormal conditions, and respond appropriately to protect life and property.

The Port of Palm Beach requires all tenants to comply with OSHA Maritime Standards (29 CFR 1915). In addition, as stated above, Emera would develop their own health and safety plan and emergency response plan should they decide to move forward with the project.

COMMENT 7:

*Utilities:* There is no discussion or analysis of potential interactions between the existing FPL Riviera Beach Energy Center and the proposed CNG facility in the event of [f] a catastrophe.

RESPONSE:

DOE recognizes that FPLs Riviera Beach Next Generation Clean Energy Center is adjacent to and south of the Port of Palm Beach. This modernized combined-cycle natural gas plant was constructed in 2014.

As indicated in the response to Comment 6 there are many layers of safeguards built into the proposed Emera facility. Similar layers of safeguards are also built into FPLs plant. Such procedures and plans include provisions for preventing and/or minimizing impacts to adjacent facilities in the event of an emergency.

**Permits/Authorizations**

COMMENT 8:

Projects involving "dewatering" may require permitting by the South Florida Water Management District's Water Use Section.

RESPONSE:

Should dewatering be required during construction activities, Emera would comply with all local, state, and federal rules and regulations and acquire all appropriate permits.

COMMENT 9:

The project has the potential to adversely impact water quality and or quantity from stormwater runoff at the proposed facility. As a result, an Environmental Resource Permit (ERP) and/or modification of the Port's existing permit may be required to address the aforementioned requirements, pursuant to Section 62-330.020, F.A.C.

RESPONSE:

Emera would comply with all local, state, and federal rules and regulations. As described in Table 2-1, Emera would coordinate with the Port of Palm Beach and Florida Department of Environmental Protection (FDEP) to determine if modifications are needed for the Port's Multi-Sector Generic Permit for Stormwater (MSGP).

COMMENT 10:

Please be advised that the Florida Department of Health in Palm Beach County is authorized by the Department to issue permits for air pollution sources in Palm Beach County.

RESPONSE:

As described in Table 2-1, Emera would coordinate with the Florida Department of Health in Palm Beach County regarding all required air emission permits.

COMMENT 11:

Any project activities performed within FDOT right-of-way and the staging and storage of equipment or materials within FDOT right-of-way will require coordination with appropriate FDOT District 4 personnel. Proposed activities within FDOT right-of-way will require plans review by, and close coordination with, FDOT. The issuance of permits from FDOT may also be required. Should the need for lane closures or traffic channeling on the state roadway system arise,

Maintenance of Traffic Plans may be necessary. Coordination with FDOT District 4 will be required for this work. If any hazardous materials will need to be transported on FDOT roads, a hazardous spills response plan will need to be prepared and coordination with FDOT District 4 will be required.

RESPONSE:

At present, work within FDOT rights-of-way is not proposed. Movement and deliveries of components and any temporary laydown areas will all occur within the Port of Palm Beach property. Should such work be determined to be necessary in the future, Emera would coordinate with FDOT District 4 and comply with all local, state, and federal rules and regulations including obtaining all necessary permits. It is not anticipated that any deliveries would be oversized loads.

---

**Water Resources**

COMMENT 12:

On page 26 in Chapter 3 "Affected Environment and Environmental Consequences", Subsection 3.1.1.3 - Wetlands and Floodplains - they are using information from the 1982 FEMA flood maps. Our question is - have they evaluated the effect of the proposed changes in the new FEMA maps that are being adopted this year in Palm Beach County and all municipalities?

RESPONSE:

Section 3.1.1.3 Wetlands and Floodplains (in Section 3.1 Water Resources) have been updated to include a description of the revised preliminary FIRM data. There is no significant difference between the 1982 maps and the proposed 2014 maps with regard to the proposed project area, as such these new flood elevations will not alter the Emera projects design or location within the POPB facility (See Figure 2.10).

COMMENT 13:

Please provide copies of the Port of Palm Beach's Section 10 and Section 404 permits or include them as supplementary information.

RESPONSE:

The Port of Palm Beach's Section 10 and Section 404 permits are public information and can be made available via request to the appropriate Regulatory Branch of the U.S. Army Corps of Engineers.

COMMENT 14:

Provide documentation that the Port and Emera have guaranteed that the project and the Port will be in full compliance with local requirements. No such compliance guarantee can be provided within the context of the EA.

RESPONSE:

The EA publically declares Emera's commitment to fully comply with all relevant local, state, and federal rules, and regulations and to obtain all applicable permits.

COMMENT 15:

What amounts of contaminated water must be generated to classify as more than a major impact (above the 730 gallons estimated to be produced by the facility)?

RESPONSE: This contaminated water is being extracted from the pipeline gas through a desiccant drying process and is not generated from water usage. This quantity may vary based on the "wetness" of gas being received from the pipeline and compressed, however is estimated to be 730 gallons per year. Produced wellhead natural gas generally has a relatively small amount of residual water. The bulk of this water is removed in upstream gas processing facilities, prior to entering the gas transmission pipeline. For certain natural gas uses, such as engine fuel, remaining water needs to be removed further to achieve a drier gas specification requirement. The water removed by the desiccant drying equipment is not pure and may contain a small amount of residual liquid hydrocarbons, foreign material from upstream equipment, and/or gas odorant (i.e. mercaptan). The estimated volume of water is based on maximum amount permissible by transmission and distribution pipeline specification, and it is anticipated that the actual water volumes would normally be less than this maximum permissible amount.

COMMENT 16:

What impact would this proposal have on regional water resources in a worst case scenario if there was an explosion?

RESPONSE:

Natural gas has an ignition temperature of approximately 1,200° Fahrenheit. It also has a narrow range of flammability, that is, in concentrations in air below about 5% and above about 15%, natural gas will not burn. The high ignition temperature and limited flammability range make accidental ignition or combustion of natural gas unlikely.

Natural gas containers are “sealed,” which prevents spills or evaporative losses. The design of natural gas cylinders is subjected to a number of federally required “severe abuse” tests, such as heat and pressure extremes, gunfire, collisions and fires. Such tests are required to ensure the containers meet federally regulated standards or integrity/stability (49 CFR 571.304). If a leak were to occur, the natural gas would dissipate up into the atmosphere because it is lighter than air and dissipates rapidly if it is released in case of an accident.

As described in Section 2.2.5 Startup, Shutdown, Maintenance, and Emergency Conditions, Emera has a preliminary Emergency Response Plan and would work with the Port of Palm Beach and City of Riviera Beach to ensure the facility’s final Emergency Response Plan is consistent and compliant with the Port’s requirements and relevant city regulations. The Emergency Response plan would include procedures for natural disaster preparation (including storing and securing hazardous materials) and response, fire, spills, and hazardous materials releases at the facility. Emergency management planning for the facility at the Port and the vessel transporting CNG will comply with OSHA Maritime Standards (29 CFR 1915).

---

### **Aquatic Resources**

#### COMMENT 17:

The FWC advises that Florida manatees are known to frequent the waters near the Port of Palm Beach area and FWC has records of eight manatee mortalities within a 0.5-mile radius of the project area since 2005. The draft EA states that "the ocean-going vessels utilized by the CNG facility would comply with all port procedures to minimize potential impacts to aquatic resources as a result of project operations. The use of seawater for ballast or cooling would not have an impact on aquatic resources. The water used for cooling would have a higher temperature upon discharge as compared to intake which could attract manatees." The draft EA lacks additional information as to where the warm water would be discharged, how often the discharges would occur, what the approximate temperature of the warm water would be, and how much warmer the temperature would be compared to ambient water. FWC staff cannot determine potential impacts of the proposed project on manatees without the additional information listed above as the impacts are determined on a case-by-case basis. FWC requests that the applicant contact the FWC staff identified below to discuss avoidance and minimization measures for manatees. Additionally, staff recommends that the applicant coordinate with the USFWS for information regarding manatees as well as any other federally listed species that may be impacted by the proposed project. The USFWS South Florida Ecological Services Office may be contacted at (772) 562-3909 to discuss any necessary federal requirements.



RESPONSE:

As requested, Emera contacted the Florida Fish and Wildlife Conservation Commission on April 16 to discuss this comment. The following information was shared during this call. Ballast and cooling water discharges are prohibited within the Port of Palm Beach's tariff waters including the Lake Worth Lagoon. Discharges would occur on an as needed basis in accordance with ship operations outside the Lagoon in primarily international waters. Temperatures of the discharged water would be variable depending on the ambient temperatures of the surrounding water, time of year, amount of water discharged, etc. Because discharges are prohibited within the lagoon, and would therefore occur within the open ocean where there is already a lower potential for manatee/ship interactions, the potential for impacts to manatees associated with possible ballast and cooling water discharges from the ocean-going vessel is considered minor.

COMMENT 18:

What impact would this proposal have on aquatic resources, including threatened or endangered species in a worst case scenario explosion?

RESPONSE:

Emergency management planning for the facility at the Port and the vessel transporting CNG will comply with OSHA Maritime Standards (29 CFR 1915). An emergency at the facility would not impact aquatic resources as the facility is located inland. An emergency on the ship would have limited impacts to aquatic resources, including threatened and endangered species. A worst case scenario could result in small amounts of debris, including possibly limited amounts of oils or hazardous materials entering the ocean environment. However, the amount of such materials that could enter the ocean would be limited in scope due to the size and carrying capacity of the ocean-going vessel. Such an incident would cause only temporary, minor impacts to aquatic resources as any materials entering the ocean would quickly be diluted.

COMMENT 19:

Although stated as "minor" this proposal would create additional impacts to aquatic resources and to ecologically unique habitat than would not occur if a No-Action Alternative occurred. Additional daily cargo ships would also increase the likelihood of conflicts with objects in and around the Palm Beach Inlet and the Port of Palm Beach.

RESPONSE:

As described in Section 3.1.2 Environmental Consequences (in Section 3.1 Water Resources) it is acknowledged that implementation of the proposed action does produce minor impacts as compared to no impacts associated with the No-Action Alternative.

**Air Quality**

COMMENT 20:

The Florida Department of Health in Palm Beach County is authorized by the Florida Department of Environmental Protection to issue permits for air pollution sources in Palm Beach County.

RESPONSE:

Table 2-1 and pages 21-22 of the Draft EA were revised to reflect this information.

COMMENT 21:

Additional cargo ships would produce more air pollution locally. Trucks within the Port of Palm Beach would produce additional emissions.

RESPONSE:

The addition of one shipping vessel per day and the use of trucks within the Port of Palm Beach would only constitute a minor impact to air quality as described in Section 3.3.3 Environmental Consequences (of Section 3.3 Air Quality and Greenhouse Gases). Emera will conform with all necessary Air Quality Permits or Air Permit Modifications through all State and Local permitting agencies.

COMMENT 22:

What impacts are possible due to natural gas leaking or being vented into the atmosphere?

RESPONSE:

The impacts associated with natural gas leaking or being vented into the atmosphere are discussed Section 3.3.3 Environmental Consequences (of Section 3.3 Air Quality and Greenhouse Gases).

COMMENT 23:

If dust might escape into the atmosphere associated with construction activities, would testing of the soils be required to ensure that they are free of contaminants?

RESPONSE:

A Phase I Environmental Site Assessment (ESA) was conducted in April 2015 to identify the potential risk of soil contamination in the project site (See Appendix G). The Phase I ESA looked at

current and historical conditions at and in the vicinity of the site including hazardous materials handling, above and underground storage tanks, land use, etc. No current, controlled, or historical recognized environmental conditions were identified during the assessment. There is no indication that soil or groundwater contamination is present or should be a concern. If contamination became suspected for any reason after site construction commenced, a Phase II Environmental Assessment, including soil testing and/or groundwater testing, would be conducted. If soil or groundwater contamination were identified at that time, a remediation plan would be developed in accordance with all applicable state regulations prior to construction. Best management practices would be implemented during construction to keep all fugitive dust related impacts to a minimum.

---

### **Solid and Hazardous Waste**

#### COMMENT 24:

The Draft EA does not appear to include information on prior environmental assessments that have been conducted or will be conducted to determine whether soil, sediments, groundwater, or surface waters have been adversely affected (contaminated) by former industrial activities at the Port of Palm Beach. Part of the environmental assessment should include, among other things: the details of historical potential hazardous materials handling in relation to canals and surface water bodies; locations of any above-ground, underground or temporary storage tanks, equipment maintenance and storage, petroleum product storage, on-site landfill/solid waste disposal areas, hazardous materials handling areas, septic tanks, pipelines; and locations and types of any water production wells within a one-mile radius of the site boundary (potable, pesticide make-up, irrigation, industrial, etc.). Groundwater flow directions in all affected zones needs to be provided. What soil, sediment, surface water and groundwater cleanup concentrations would be proposed? Please be advised that Rule 62-780, Florida Administrative Code (F.A.C.), entitled "Contaminated Site Cleanup Criteria" and Rule 62-777, F.A.C., may be applicable, depending on the findings of the environmental assessments. These rules may be found at the following website: <http://www.dep.state.fl.us/waste>.

#### RESPONSE:

A Phase I Environmental Site Assessment (ESA) was conducted in April 2015 to identify the potential risk of soil contamination in the project site (See Appendix G). The Phase I ESA looked at current and historical conditions at and in the vicinity of the site including hazardous materials handling, above and underground storage tanks, land use, etc. No current, controlled, or historical recognized environmental conditions were identified during the assessment. There is no indication that soil or groundwater contamination is present or should be a concern. If contamination became suspected for any reason after site construction commenced, a Phase II Environmental Assessment,

including soil testing and/or groundwater testing, would be conducted. If soil or groundwater contamination were identified at that time, a remediation plan would be developed in accordance with all applicable state regulations prior to construction.

COMMENT 25:

The applicant should be advised that environmental contamination assessment and cleanup decisions are based on, among other things, projected future uses of the property and the potential for exposure to site workers, future residents, workers, etc. The applicant should seek legal advice to be fully appraised of the potential future liabilities with regard to "due diligence" responsibilities and the result of spreading any contamination from untested soils and groundwater off-site or to previously uncontaminated areas.

RESPONSE:

A Phase I Environmental Site Assessment (ESA) was conducted in April 2015 to identify the potential risk of soil contamination in the project site. The Phase I ESA looked at current and historical conditions at and in the vicinity of the site including hazardous materials handling, above and underground storage tanks, land use, etc. No current, controlled, or historical recognized environmental conditions were identified during the assessment. There is no indication that soil or groundwater contamination is present or should be a concern. If contamination became suspected for any reason after site construction commenced, a Phase II Environmental Assessment, including soil testing and/or groundwater testing, would be conducted. If soil or groundwater contamination were identified at that time, a remediation plan would be developed in accordance with all applicable state regulations prior to construction.

COMMENT 26:

The accurate identification, characterization and cleanup of sites require experienced consulting personnel and commitment of the developers and their representatives, and will likely be very time-consuming. Early planning to address these issues is essential to meet construction and cleanup (if required) timeframes. Innovative technologies, such as special stormwater management systems, engineering controls and institutional controls, such as conditions on water production wells and dewatering restrictions, may be required, depending on the results of environmental assessments.

RESPONSE:

A Phase I Environmental Site Assessment (ESA) was conducted in April 2015 to identify the potential risk of soil contamination in the project site. The Phase I ESA looked at current and

historical conditions at and in the vicinity of the site including hazardous materials handling, above and underground storage tanks, land use, etc. No current, controlled, or historical recognized environmental conditions were identified during the assessment. There is no indication that soil or groundwater contamination is present or should be a concern. If contamination became suspected for any reason after site construction commenced, a Phase II Environmental Assessment, including soil testing and/or groundwater testing, would be conducted. If soil or groundwater contamination were identified at that time, a remediation plan would be developed in accordance with all applicable state regulations prior to construction.

COMMENT 27:

If the soil is disturbed or relocated, would it be tested for potential contaminants?

RESPONSE:

A Phase I Environmental Site Assessment (ESA) was conducted in April 2015 to identify the potential risk of soil contamination in the project site. The Phase I ESA looked at current and historical conditions at and in the vicinity of the site including hazardous materials handling, above and underground storage tanks, land use, etc. No current, controlled, or historical recognized environmental conditions were identified during the assessment. There is no indication that soil or groundwater contamination is present or should be a concern. If contamination became suspected for any reason after site construction commenced, a Phase II Environmental Assessment, including soil testing and/or groundwater testing, would be conducted. If soil or groundwater contamination were identified at that time, a remediation plan would be developed in accordance with all applicable state regulations prior to construction.

COMMENT 28:

One could make the argument that the location meets the EPA definition for a brownfield.

RESPONSE:

The location has not been designated a brownfield by any local, state, or federal agency and should not be referred to as such.

COMMENT 29:

The applicant is advised that many types of facilities generate some type of hazardous material, especially during construction activities (paints, solvents, sealants, adhesives, oils, roofing coatings, etc.) For example, lubricating oils used in generators, air compressors and machinery are frequently handled. Please be advised that petroleum storage tanks at fuel stations and for

emergency generators must be constructed to comply with the current requirements of Chapter 62-761 or 62-762, F.A.C., as appropriate.

**RESPONSE:**

Emera would comply with all local, state, and federal rules and regulations regarding the use or disposal of hazardous materials as appropriate.

**COMMENT 30:**

What specific steps does the applicant propose in order to dispose of land clearing debris and construction and demolition debris generated during facility construction? Chapter 62-701, F.A.C., contains regulations governing solid waste management. Other local regulations may also be applicable.

**RESPONSE:**

Emera would dispose of land clearing and construction and demolition debris generated during facility construction in compliance with all local, state, and federal rules and regulations regarding solid and construction waste management. Waste material generated by construction activities will be disposed of in compliance with all federal, state, and local regulations and at an approved location. Specific plans for disposal would be developed prior to commencing construction once the design of the facility is finalized and the construction plan is completed.

**COMMENT 31:**

A staging area, with controlled access, should be planned in order to safely store raw material paints, adhesives, oils, sealants, fuels, solvents, etc. that will be used during construction. All containers need to be properly labeled. The project developers should consider developing a written construction Contingency Plan in the event of a natural disaster (e.g., hurricane), spill, fire or environmental release of hazardous materials stored/handled for the project construction. Contingency planning should also include details on how construction and hazardous materials would be safely stored and secured prior to a hurricane or natural disaster.

**RESPONSE:**

As described in Section 2.2.5 Startup, Shutdown, Maintenance, and Emergency Conditions, Emera has a preliminary Emergency Response Plan and prior to commencing operations would work with the Port of Palm Beach and City of Riviera Beach to ensure the facility's final Emergency Response Plan is consistent and compliant with the Port's requirements and relevant city regulations. The Emergency Response plan would include procedures for natural disaster preparation (including storing and securing hazardous materials) and response, fire, spills, and hazardous materials releases

at the facility. The Emergency Response Plan would be finalized once the project is fully approved and permitted. Emera would coordinate with all appropriate federal, state, and local agencies during finalization of the plan.

COMMENT 32:

Page 18 lists some of the waste streams expected to be generated during construction and facility operations. Please be advised that hazardous waste determinations must be conducted on all waste streams, including "contaminated water from the gas dryer" (Page 28) in accordance with Title 40 Code of Federal Regulations, Part 262.11 as referenced in Chapter 62-730, F.A.C. If the material is hazardous, then it must be recycled, treated, stored, or disposed at a hazardous waste facility authorized by the FDEP, EPA or another state. Also, regardless of quantity, the generator of hazardous waste is ultimately responsible for the waste from "cradle to grave," and can be held liable for improper management of hazardous waste even though it may have been sent to an authorized hazardous waste management facility using a licensed transporter authorized by the FDEP. Claims that material is not a waste or is exempt from must be documented. [Rule 62-730.030(4), F.A.C.]. In addition, Emera must keep records of hazardous waste generated that were subsequently managed pursuant to an exclusion. The hazardous waste regulations may be found on the following internet site:

<http://www.dep.state.fl.us/waste/categories/hwRegulation/pages/FLEHazInstructions.htm>.  
and forms may be found at: [http://www.dep.state.fl.us/waste/quick\\_topics/forms/pages/62-730.htm](http://www.dep.state.fl.us/waste/quick_topics/forms/pages/62-730.htm).

RESPONSE:

As described in Section 3.1.2.2 Proposed Project Operations (in Section 3.1 Water Resources), Samples from the dryer wastewater would be collected before disposal and profiled to determine the composition and concentration of any hazardous substances. Emera is assuming it would likely be hazardous and would be handled accordingly until confirmed. Wastewater from the gas dryer would be collected for off-site disposal at an approved facility in accordance with the sampling results. Emera would comply with all local, state, and federal hazardous waste handling and disposal rules and regulations and maintain all appropriate records.

---

**Socioeconomics**

COMMENT 33:

The EA states it is "likely that construction jobs would be filled by local or regional construction companies" and that "the operations state would result in a small increase in new jobs, likely to be

filled from the local population”. How is “local” and “regional” defined? What facts were used to generate and support this statement?

RESPONSE:

Local is defined approximately as within the City of Riviera Beach within an average daily commute radius (approximately a 1 hour commute radius). Regional is defined as within Palm Beach County or neighboring counties. For small construction projects it is often more cost effective for local or regional companies to be contracted for the work. As the EA states, while this is a “likely” scenario. It is possible for companies not considered “local” or “regional” to be used.

COMMENT 34:

What is the socioeconomic impact of the proposed use on local property values, public services and public safety; especially in a catastrophe scenario?

RESPONSE:

The addition of the proposed CNG facility would not be anticipated to cause people to choose not to live in this area or to correspondingly impact property values. The proposed CNG facility would be constructed in an existing industrial area (Port of Palm Beach), adjacent to a large 1250 MW power generating station which also runs on natural gas. It is DOE’s position that the addition of the smaller proposed CNG facility would not constitute a larger impact on property values, to public services, and to public safety than the already existing facilities.

COMMENT 35:

This proposal could have a negative impact on property values as fewer individuals would desire to live within close proximity of this proposed use. It may also discourage future investment and development in all areas that may fall within the currently undetermined blast zone. This contradicts the City’s desire for redevelopment and growth, especially considering that a majority of the single family neighborhood located to the west of the proposed site falls within the Riviera Beach Community Redevelopment Agency overlay.

RESPONSE:

The addition of the proposed CNG facility would not be anticipated to cause people to choose not to live in this area or to correspondingly impact property values. The proposed CNG facility would be constructed in the existing industrial area (Port of Palm Beach), adjacent to a large 1250 MW power generating station which also runs on natural gas. The addition of the smaller proposed CNG facility would not constitute a larger impact on property values than the already existing



facilities. The existence of the Port itself or the FPL plant are more likely to cause individuals to choose not to live in this area than the addition of the CNG facility.

According to Trulia.com, median listing prices for homes in this neighborhood west of the proposed project site are higher immediately adjacent to the Port (\$59,000) as compared to further west or north in the neighborhood (\$43,500-\$56,000 respectively). This indicates that property values increase as they get in closer proximity to the Port contrary to the Comment (Trulia.com 2015, [http://www.trulia.com/home\\_prices/Florida/Palm\\_Beach\\_County-heat\\_map/](http://www.trulia.com/home_prices/Florida/Palm_Beach_County-heat_map/)).

The Port of Palm Beach, including the proposed site, and the single family neighborhood located to the west of the proposed site, outside of the Port of Palm Beach lie within the Riviera Beach Community Redevelopment Agency overlay. The Riviera Beach Community Redevelopment plan recommends improvements for expanding Dr. Martin Luther King Boulevard, which transects the community located to the west of the proposed site, from a two-lane to a four-lane road. The purpose of this road widening project is to improve access to the Port of Palm Beach for truck traffic. The road has also been designated as part of the State Intermodal System. The plans for the road improvements have been designed to minimize impacts to the neighborhood. Plans also include improvements to overall neighborhood conditions. Moreover, the Emera project's proposed actions would not impact and are not contradictory to these redevelopment plans. Indeed, the Riviera Beach Community Redevelopment Plan says that the "Port of Palm Beach will probably become an increasingly more essential component of the Palm Beach County economy when considering energy and food supply demands." (page 53 of the City of Riviera Beach Community Redevelopment Agency Plan 2011). The proposed project is anticipated to increase investment in the Port and therefore in Riviera Beach and Palm Beach County.

---

### **Public & Occupational Health & Safety**

COMMENT 36:

Overweight vehicles and/or equipment transported on the State Highway System are subject to the requirements of Sections 316.550 and 316.535, Florida Statutes, and Rule Chapter 14-26, Florida Administrative Code, "Safety Regulations and Permitting Fees for Overweight and Overdimensional Vehicles."

RESPONSE:

Emera would comply with all local, state, and federal rules and regulations regarding overweight and overdimensional vehicles. In the unforeseen case where an over-dimensional or overweight

vehicle could be needed during construction, all requisite permits from Florida Department of Highways will be acquired.

COMMENT 37:

The proposed volume of natural gas to be compressed is enormous (9.125 billion standard cubic feet per annum, up to 8 million standard cubic feet per day, with the capability of expanding to load up to 25 million standard cubic feet per day). In a worst case scenario, what is the estimated blast radius if an explosion were to occur? Our calculations indicate that it would be devastating. Our estimation is without factoring in the potential for additional interactions with other adjacent uses and combustible materials.

RESPONSE:

While this may seem like a large quantity of natural gas, in 2013, the State of Florida consumed 122 billion standard cubic feet of natural gas. (EIA - [http://www.eia.gov/dnav/ng/ng\\_cons\\_sum\\_a\\_EPG0\\_VCO\\_mmcfc\\_a.htm](http://www.eia.gov/dnav/ng/ng_cons_sum_a_EPG0_VCO_mmcfc_a.htm)). Emera's maximum volume proposed of 9.125 billion standard cubic feet per year represents 0.75% of this amount. Also of note is an adjacent natural gas fired power plant which consumed approximately 40 billion standard cubic feet of natural gas in the 12 months from May 2014 to April 2015, i.e. 4.3 times more than the maximum volume proposed.

It is generally accepted that outdoor natural gas has a low risk of explosion. Natural gas has a low reactivity and tests show the risk of a vapor cloud explosion to be lower than for other common hydrocarbons. As described above natural gas also has low flammability. The U.S. Nuclear Regulatory Commission 2009 report "Comparison of Blast Pressures and Effects Methodologies with Application to South Texas Units 3 & 4" concludes that the potential for an outdoor natural gas vapor cloud explosion is "beyond the scope of a worst credible case scenario" (page 29).

As described in Section 2.2.5 Startup, Shutdown, Maintenance, and Emergency Conditions, Emera has a preliminary Emergency Response Plan and would work with the Port of Palm Beach and City of Riviera Beach to ensure the facility's final Emergency Response Plan is consistent and compliant with the Port's requirements and relevant city regulations. The Emergency Response plan includes procedures for natural disaster preparation (including storing and securing hazardous materials) and response, fire, spills, and hazardous materials releases at the facility. The Emergency Response Plan would be finalized once the project is fully approved and permitted. Emera would coordinate with all appropriate federal, state, and local agencies during finalization of the plan.

COMMENT 38:

Has a reduced volume of CNG been considered? Why is the proposed amount necessary?

RESPONSE:

For the initial phase, the quantity was arrived at through an assessment of electricity generation assets that could be converted to use natural gas, and projected baseload gas consumption in Grand Bahama. Then, the delivery economics was determined by considering the logistics involved and other physical constraints using the proposed approach.

COMMENT 39:

Although the proposed CNG facility as stated is not within the Town of Palm Beach municipal boundaries, we are requesting a listing of all of the standards of the Florida Building Code and Florida Fire Prevention Codes that will be used in the design and construction of this project along with a set of design drawings from the engineer of record so that we may verify compliance of the facility with all applicable codes.

RESPONSE:

The list will be available and a copy provided when application is made to the City of Riviera Beach.

COMMENT 40:

We are requesting that you provide us with assurances that the Coast Guard and other key federal and local agencies have approved the proposed CNG facility. This shall include transportation and shipment arrangements through the Palm Beach Inlet.

RESPONSE:

Please see Appendix A of the EA for the distribution list that includes representatives from the Coast Guard and other key federal and local agencies. The Coast Guard and other key federal agencies were sent individual hard copy packages. No responses were received by the Coast Guard, U.S. Army Corps of Engineers, or the U.S. Fish and Wildlife Service.

COMMENT 41:

We would also request that Emera Gas Company provide copies and include Town Emergency Response personnel in the indicated development of the Incident Action Plan (working with all key local and federal agencies) for the proposed CNG facility at the Port of Palm Beach. A joint review of the Incident Action Plan should be performed by all stake holders. A review of current shipboard firefighting tactics should be updated to reflect addition of this type of facility.

RESPONSE:

Emera would include and coordinate with Town Emergency Response personnel in the development of the Incident Action Plan should they decide to move forward with the project.

COMMENT 42:

On page 6 of the Draft EA, under "Public and Occupational Health and Safety", it mentions that "the greatest potential hazard is a fire or explosion related to a leak or rupture at the facility or within the compressed tanks during shipping." Can you provide us with any instances of where this has occurred and what the consequences and impacts were to the surrounding areas?

RESPONSE:

Because of the attention to safety associated with the training, construction, and maintenance of such compressed tanks the potential for such fires or explosions is considered rare. A review of the Pipeline and Hazardous Materials Safety Administration (PHMSA) database for incident reports involving compressed natural gas in the United States over the last ten (10) years was conducted. Two reports were identified: 1-2014080058 and 1-2005091036, respectively. The first incident resulted in an explosion and fire from a high impact accident on a highway. The second incident resulted in a fire but there was no explosion. Natural gas has a low reactivity and tests show the risk of a vapor cloud explosion to be lower than for other common hydrocarbons. As described above natural gas also has low flammability. The U.S. Nuclear Regulatory Commission 2009 report "Comparison of Blast Pressures and Effects Methodologies with Application to South Texas Units 3 & 4" concludes that the potential for a natural gas vapor cloud explosion is "beyond the scope of a worst credible case scenario" (page 29).

COMMENT 43:

The connection and disconnection process associated with the filling of tanks prior to shipping presents a risk for mechanical failures or human error, which is not discussed within the EA.

RESPONSE:

The impacts associated with all project operations, including the connection and disconnection process, are discussed in Section 3.6.2.2 Proposed Project Operations (within Section 3.6 Public and Occupational Health and Safety).

Emera agrees and recognizes the importance of performing connection and disconnection tasks safely in addition to timely mechanical inspections. As such, an initial review of safeguards was conducted on the preliminary facility concept to bring forward

recommendations to mitigate risks associated with this activity. Although Emera's design is not finalized, the following mitigations are proposed to be implemented:

- Operators performing connection and disconnection activities will be trained to perform this task safely and will also be using a step by step procedural checklist.
- Once the tank container is filled and prior to hose disconnection, the filling hose will be isolated using valves on the tank-container side and on the filling station side; this will allow for the hose's content to be depressurized using a vent line. The hose will be subsequently disconnected from the tank container in its depressurized state.
- Physical connection of the fill hose to tank container will be performed while the hose and tank container connections are not pressurized.
- Hoses and nozzles will be inspected on a weekly basis initially and damaged parts will be replaced proactively. If the wear and tear discovered at this frequency dictates a different frequency, an appropriate change will be made to the preventive maintenance program.
- Actuated valves will be installed on the station side and on the tank container to remotely initiate the filling process while the operator is not in close proximity to the hose.
- Additionally, safety devices to limit whipping action of hoses will be installed to protect people and property in the event a hose does inadvertently become disconnected.

COMMENT 44:

The complexity of the public and occupational health and safety considerations seems to exceed the scope of an EA and would require an Environmental Impact Statement (EIS) or selection of the No-Action Alternative.

RESPONSE:

DOE has determined that an EA is the appropriate level of NEPA review for this project. Based on the level of DOE's involvement, the level of significance, scope, and minor environmental impacts do not rise to the level that would constitute a Major Federal Action or exceed CEQ thresholds that would require the preparation of an EIS.

COMMENT 45:

What statistical analysis has been performed to back the claims that “the construction and operation of the Emera facility would represent a minimum increase in risk to the nearby businesses and communities” and that “with implementation of these best management practices and standard operating procedures, the presence of hazardous materials on the project site would have minor impacts associated with implementation of the proposed action”? What facilities or what similar operation can this proposal be compared to?

RESPONSE:

Although a statistical analysis has not been completed, the analysis in the EA supports the claim that the construction and operation of the Emera facility would constitute a minimum increase in risk and minor impacts to the nearby businesses and communities and the environment.

A hazard and operability study (HAZOP) facilitated by a certified third party (meeting OSHA requirements in HAZOP facilitation), was conducted on the preliminary facility design to provide a detailed qualitative risk assessment of the CNG filling facility and bring forward recommendations to mitigate risks associated with the CNG operation. As a result, various layers of protection and safeguards are built into the facility design and operation to reduce the risk of potentially hazardous events that could impact the public or the environment. Layers of protection are designed in such a way that they are independent of each other enabling implementation of each protection measure regardless of the action or failure of any other protection measure. The layers of protection employed by the Emera facility includes:

- Facility designed to prevent hazardous events. This requires the use of suitable materials; use of appropriate operating and design limits, for all equipment and vessels; adequate design to withstand hurricane force winds; appropriate electrical area classification; and proper equipment and building spacing.
- Natural gas container design is subjected to a number of federally required “severe abuse” tests, such as heat and pressure extremes, gunfire, collisions and fires. Such tests are required to ensure the containers meet federally regulated standards or integrity/stability (49 CFR 571.304).
- Use of appropriate control systems including monitoring systems and alarms; remotely-operated control and isolation valves; and operating procedures to ensure the facility remains within all appropriate operating and design limits.
- Safety-instrumented prevention systems including emergency shutdown systems.
- Physical protection systems including pressure relief valves.

- Site security measures for site access control including inspections and patrols; response procedures for addressing security breaches; and liaison with local law enforcement.
- Emergency response including hazard detection and control equipment, methane detection system, fire protection system, and coordination with local emergency responders.
- Operator training and implementation of a preventative maintenance program.
- In addition, a Quantitative Risk Assessment will be completed to inform the final design, Emergency Response Plan and local permitting process as the project progresses.

The use of such protection layers in combination with the inherent properties of natural gas (i.e. limited flammability range, rapid dissipation, low risk of explosion in outdoor environment) mitigates the potential for impacts to the public or the environment with respect to safety concerns.

COMMENT 46:

Based on the EA document it appears that no storage of hazardous/explosive materials is going to be at the site. Can this be confirmed?

RESPONSE:

Explosive materials (Class 1 hazardous materials as defined by U.S. Department of Transportation Code of Federal regulations 49 CFR 173.50 and Florida Building Code) will not be present at site. Natural gas does NOT fall under the definition of “Explosives” by Florida Building Code (section 307.2), 18 U.S. Code Chapter 40, nor as defined by the U.S. Department of Transportation Code of Federal Regulations 49 CFR 173.50 (Class 1 hazardous material). As mentioned in Section 2.2.2 Facility Description any potentially hazardous materials stored on site would be in small quantities and for operational purposes. A small diesel storage tank for tractor fuel maybe located within the facility footprint. Otherwise, only small amounts of potentially hazardous materials associated with the maintenance and operation of the facility and equipment would be stored onsite. Such materials could include oils, lubricants, cleaning fluids, etc. All hazardous materials would be in appropriate containers, in appropriate locations, with proper labeling and monitoring, and be handled in full compliance with all local, state, and federal requirements and regulations.

On a daily basis, 12-16 trailers with tank-containers filled with CNG will be parked temporarily either at the compression facility or at the staging area at the pier until they can be loaded onto the roll-on/roll-off ocean vessel.

## **Environmental Justice**

### COMMENT 47:

This proposal increases the risk of negative impacts to the health, safety and welfare of the residents of the City of Riviera Beach, while offering little to no benefit. One would assume that no individual would voluntarily choose to reside next to a facility of this nature, which directly relates to environmental justice concerns.

### RESPONSE:

The addition of the proposed CNG facility would not be anticipated to cause disproportionate health, safety, or welfare impacts to residents of the City of Riviera Beach with respect to environmental justice. The proposed CNG facility would be constructed within the already industrialized Port of Palm Beach, next to a large 1250 MW power generating station which also runs on natural gas. The existence of the Port itself or the FPL plant are more likely to cause individuals to choose not to live in this area than the addition of the CNG facility.

### COMMENT 48:

Environmental justice has been a concern in the City for decades. Our residents have historically faced a significantly higher amount of detrimental uses than neighboring areas. The 2013 U.S. Census estimate states that the City's population is predominately Black or African American at 67.47% of the total population. Within PBC, the population is only 17.03% Black or African American. Additionally, the City's 2013 estimated poverty level is 26.76% while PBC's is 14.54%. This warrants further analysis and consideration as it appears that Emera's proposal would not be consistent with the public interest and would have disproportionately adverse impacts on the City's population. This proposal seems to have the potential to significantly benefit other entities involved, but not the City or our residents.

### RESPONSE:

The addition of the proposed CNG facility would not be anticipated to cause disproportionate impacts to residents of the City of Riviera Beach. The proposed CNG facility would be constructed in the already highly industrialized Port of Palm Beach, next to a large 1250 MW power generating station which also runs on natural gas. The CNG facility is consistent with existing land uses at the Port and, as was discussed earlier, is not inconsistent with City development plans. The Port of Palm Beach is well suited for this type of development. Moreover, since no land acquisition, real estate condemnation, or expansion into a "green space" would occur, the possibility for the Emera Project to be construed to have an Environmental Justice issue is minimal.



**Cumulative Impacts**

COMMENT 49:

On page 7 of the EA, a “Cumulative Impacts” section exists, however it was not expanded upon. There is an absolute need to understand how this proposal would interact with adjacent uses. Also, are there any anticipated impacts associated with the potential for additional phases of this project?

RESPONSE:

Section 4.0 Cumulative Impacts evaluates known or reasonably foreseeable current and future projects in the vicinity of the proposed Emera facility and evaluates the potential impacts associated with those projects in conjunction with the proposed action. Additional projects within the City of Rivera Beach have been added to this section of the EA to demonstrate there would be no impact to adjacent uses.

---

**General**

COMMENT 50:

What agency would be responsible for ensuring that no more than 9.125 billion standard cubic feet per annum would be shipped from this location? Who is responsible for regulating the total amount of CNG stored on-site and what is the maximum amount allowed?

RESPONSE:

The amount of CNG shipped is recorded and reported monthly to DOE pursuant to Emera’s specific authorization and export approvals. The filled CNG tank container trailers are parked on-site temporarily until they can be loaded onto the roll-on/roll-off ocean vessel. No other gas is stored at the facility at any time.

COMMENT 51:

What approvals would be needed to expand the facility and/or increase the amount of CNG proposed for export?

RESPONSE:

Emera CNG, LLC would be required to request DOE authorization to increase limits identified in the export application and/or expand the facility. Additionally, any expansion would require a

review of existing permits with proper amendments made, and obtain required construction permits for the proposed expansion.

COMMENT 52:

This proposal would result in new local environmental impacts; increased ship traffic and associated pollutants emitted from these ships.

RESPONSE:

The potential impacts associated with the additional ship traffic are discussed in the EA. Emera would comply with all local, state, and federal rule and regulations and obtain all necessary permits to minimize and mitigate any potential impacts. As stated in the EA, the Port of Palm Beach is the fourth busiest port in the State of Florida, and the addition of one ship per day is within what is considered the normal operating range for a port of this nature.

COMMENT 53:

Emera's proposal is to supplement or replace one form of non-renewable fossil fuel with another (crude oil with natural gas) lacks long term sustainability. Emera would have the alternative to the proposed action of focusing on renewable power generation in the Bahamas through solar and/wind production, thus avoiding the potential for negative local impacts. As presented, the proposal has little to no benefit to the City of Riviera Beach, yet, the City would have to assume a significant amount of environmental risk and potential costs.

RESPONSE:

The use of solar or wind power is beyond the scope of DOE's authorization. These energy sources cannot always meet demand, nor does DOE have input into power decisions made by Grand Bahama.

COMMENT 54:

“City of Riviera Beach” and “Palm Beach County” should appear in the project title and “early and often” within the body of the report to clarify the project location.

RESPONSE:

City of Riviera Beach and Palm Beach County have been added to the title and to the body of the report in multiple locations, including in the Summary on page 1, Section 1.0 Introduction on page 8, table 1.1-1, and Section 2.0 on page 16. Further, municipal boundaries have been added

to Figure 2.10 to better illustrate the location of the Emera Project in relation to these municipalities.

COMMENT 55:

Figure 2.1 indicates that the proposal is outside of the City's jurisdiction as well as not showing neighboring municipalities (West Palm Beach, Palm Beach, Palm Beach Shores). Figure 2.2 and 2.10 attempts to illustrate the boundary of the Port of Palm Beach, however it is not accurately drawn and requires revision. Also Figure 2.2 is lacking the jurisdictional boundaries of neighboring municipalities.

RESPONSE:

Figures 2.1 and 2.2 have been modified to better display the City jurisdiction, the surrounding municipalities, and the correct Port of Palm Beach boundaries.

COMMENT 56:

Request that the EA be advertised again within regional publications such as the *Palm Beach Post*.

RESPONSE:

The availability of the Draft EA was announced in the newspaper with the largest and broadest circulation in proximity to the proposed project, the *South Florida Sun-Sentinel* where it ran for three days, including the Sunday edition. This announcement also indicated DOE web sites where the entire document was located. A hardcopy of the draft EA was also placed in the Riviera Beach Public Library public reading room. Finally, letters announcing the availability of the EA including information on where to obtain it, and electronic copies of the EA were made available to multiple federal, state, and local agencies. When the EA is final, it will be posted on DOE's web sites. No re-advertisement of the Draft EA will occur.

COMMENT 57:

This or any other EA could not adequately analyze and synthesize the multitude of unique and potentially hazardous aspects of this proposal which would cause significant adverse impacts to the environment and community. The fact that the Port of Palm Beach currently handles and stores numerous materials that have the potential to be extremely hazardous individually, illustrates the need to further contemplate how these materials and substances would interact in the event of a worst case scenario explosion...Without a similar project to establish a baseline for

analysis, an EA is not configured in the proper manner to allow for the necessary in-depth analysis required for this proposed project. The No-Action Alternative would result in no increased threat to the local environment or population, including adjacent residents and neighboring schools.

RESPONSE:

DOE believes this EA adequately analyzes and synthesizes the potential impacts to the environment and human health associated with Emera's application to export compressed natural gas from a facility to be constructed at the Port of Palm Beach, in the City of Rivera Beach, in Palm Beach County, Florida. Emera's Emergency Response Plan will address potentially foreseeable incidents. DOE concludes the impacts associated with the proposed action are minor and do not constitute an increased threat to the local environment or population.

DOE is not providing funding or cost-sharing for the Emera Project. DOE has determined that an EA is the appropriate level of NEPA review for this project. Based on the level of DOE's involvement, the level of significance, project scope, and minor environmental impacts, the project does not rise to the level that would constitute a Major Federal Action nor does it exceed CEQ guidelines that would require the preparation of an EIS.

## **APPENDIX G**

### **Phase 1 Environmental Site Assessment**

#### **Executive Summary**

## Executive Summary

Emera CNG, LLC contracted with AECOM to perform a Phase I Environmental Site Assessment (ESA) of the property defined as a portion of the Port of Palm Beach Property, located at 301 Broadway 100, Riviera Beach, Palm Beach County, Florida (subject property). This Phase I ESA was performed in general conformance with the scope and limitations of ASTM Standard Practice Designation E 1527-13 for ESAs. Exceptions to, or deletions from, this practice are described in this report.

The site visit occurred on April 24, 2015. The subject property consists of one approximately 1.4-acre rectangular-shaped parcel of land which is currently developed as an asphalt-paved vehicle and shipping container staging area. The subject property is located within a larger legal parcel of land (Port of Palm Beach District) at 301 Broadway 101, Riviera Beach, Florida. The subject property contains asphalt-paved driveways, two debris piles consisting primarily of concrete, rebar, ship buoys, and scrap metal located on the central portion and one debris pile consisting of asphalt millings located on the northwestern portion, one in-ground stormwater vault, one in-ground telephone vault, and two in-ground AT&T Communications vaults. No structures were observed on the subject property. No visual evidence of underground storage tanks (e.g., vent pipes, fill ports), potable water wells, monitoring wells, clarifiers, dry wells, septic tanks, or leach fields was observed during the site visit.

The subject property is located in a mixed use area within the City of Riviera Beach. The subject property is bordered to the north by South Florida Materials/Birdsall Inc. (300 W. Middle Road). AECOM observed various ASTs on this property, which, according to the site contain diesel fuel and asphalt by-product. The subject property is bordered to the east by Avenue E, beyond which is the Port of Palm Beach District vehicle and shipping container parking area (301 Broadway 101). The subject property is bordered to the southeast by W. Port Road, beyond which is the Port of Palm Beach District office building (301 Broadway 101). The subject property is bordered to the south by W. Port Road, beyond which is the Port of Palm Beach District vehicle and shipping container parking area (301 Broadway 101). The subject property is bordered to the west by Port of Palm Beach District vehicle and shipping container parking area (333 Broadway).

Active gasoline service stations and dry cleaners were not observed in the immediate vicinity (approximately 500 feet) of the subject property.

AECOM's historical research indicates that subject property was cleared but undeveloped land by at least 1953. The 1964 and 1968 aerial photographs depict the eastern portion as developed with a rudimentary road/parking area and the western portion as grass-like vegetation. By 1973, the western portion is observed to be a paved parking area. The 1976 aerial photograph depicts the subject property as generally the same as in the 1973 photograph. By 1986, the rudimentary road on the eastern portion is no longer observed. The 1991, 1999, and 2007 aerial photographs depict the subject property as relatively the same as in the 1986 photograph. The 2010 aerial photograph depicts the subject property its current configuration with vehicles and shipping containers staged.

The address associated with the overall property of which the subject property is part, is identified on the Environmental Data Resources (EDR) US Historical Auto Stations, EDR US Historical Cleaners, Resource Conservation and Recovery Act Non-Generator/No Longer Reporting (RCRA-NonGen/NLR), Facility Index System (FINDS), Underground Storage Tank (UST), Leaking UST, Aboveground

Storage Tank (AST), Responsible Party, and Financial Assurance databases. Based upon the information known about the subject property (sites are not listed on contamination-related databases, no violations reported, and regulatory status), these listings do not represent an environmental concern with regards to the subject property, in AECOM's opinion.

Based on the above-described activities, no recognized environmental conditions (RECs), controlled RECs (CRECs), or historical RECs (HRECs) were identified in connection with the subject property; however the following de minimis condition (DMC) was identified in connection with the subject property:

- AECOM observed oily staining (less than 2 feet x 2 feet), presumably from leaks or spills, on the intact asphalt in various locations throughout the subject property. This staining is considered to be a DMC, in AECOM's opinion.