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DRAFT

ENVIRONMENTAL ASSESSMENT

FOR THE

EMERA CNG, LLC,
COMPRESSED NATURAL GAS PROJECT,
PORT OF PALM BEACH, FLORIDA

U.S. Department of Energy

National Energy Technology Laboratory

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COVER SHEET

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

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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 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, where the trailers would be loaded onto a roll-on/roll-off (RO/RO) ocean going carrier. 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 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), an Emera affiliate. GBPC's electric generation plants currently are powered by heavy fuel oil. Emera expects this diversification of fuel sources, after they are retrofitted to burn natural gas, would stabilize and possibly reduce customer electricity rates and stimulate economic growth in the Bahamas. After modifications, the power plant will be considered a flex fuel plant capable of utilizing both natural gas and petroleum as fuel sources.

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

ACRONYMS AND ABBREVIATIONS

°	degrees
%	percent
Bscf	billion standard cubic feet
CEQ	Council on Environmental Quality
CFR	Code of Federal Regulations
CH_4	methane
CNG	compressed natural gas
CO	carbon monoxide
CO_2	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_2O	nitrous oxide
NAAQS	National Ambient Air Quality Standards
NEPA	National Environmental Policy Act
NFPA	National Fire Protection Association
NGA	Natural Gas Act
NO_2	nitrogen dioxide
NOAA	National Oceanic and Atmospheric Administration
NPDES	National Pollutant Discharge Elimination System
NWI	National Wetlands Inventory
O_3	ozone
OSHA	Occupational Safety and Health Association
Pb	lead
PFC	perfluorocarbon
$PM_{2.5}$	particulate matter with median aerodynamic diameter less than 2.5 micrometers
PM_{10}	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_6	sulfur hexafluoride
SFWMD	South Florida Water Management District
SHPO	State Historic Preservation Officer
SO_2	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

LIST OF FIGURES

LIST OF TABLES

LIST OF APPENDICIES

SUMMARY

The U.S. Department of Energy (DOE) prepared this draft 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, Florida, to be constructed for the purpose of compressing and exporting up to 9.125 billion standard cubic feet (Bscf) per annum of gaseous natural gas (up to 8 million standard cubic feet per day [MMscfd], with the capability of expanding to load up to 25 MMscfd) 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 trade or policy. This EA also evaluates the No-Action Alternative, under which Emera would not be authorized to construct the proposed project and would not export natural gas from the Port of Palm Beach.

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 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),[1] and ii) countries with which the United States has not entered into a free trade agreement providing for 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, DOE/FE granted the FTA portion of the Application on June 13, 2014, in DOE/FE Order No. 3447.

Under Section 3(a) of the NGA, applications to export natural gas, including CNG, to non-FTA countries require DOE 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). 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) providing notice of Emera's Application and is seeking public

[1] 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.

comment on the portion of Emera's Application requesting authorization to export CNG to non-FTA countries.

DOE's proposed action is to grant authorization for the proposed export of CNG 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, in response to Emera's Application. DOE's authorization would allow Emera to export the proposed volume of CNG from its proposed facility at the Port of Palm Beach to non-FTA countries.

This 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 draft 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 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.

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 United States Army Corps of Engineers (USACE) which ensure protection of the water resources in and adjacent to the Port and minimizes 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 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; no impacts to wetlands are anticipated as a result of construction activities. 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 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. 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. 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 and would 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 environmental, health, and safety (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 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.

1.0 INTRODUCTION

This draft 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, Florida, to be constructed for the purpose of compressing and exporting up to 9.125 billion standard cubic feet (Bscf) per annum of gaseous natural gas (up to 8 million standard cubic feet per day [MMscfd], with the capability of expanding to load up to 25 MMscfd) via trailers, tank containers, and ocean going carrier 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 U.S. law or policy.

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 per year (Bscf/yr) of natural gas. 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 Riviera Beach, 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 with DOE/FE 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) 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 Commonwealth of the Bahamas will not be subject to the Commission's jurisdiction under the NGA. Subsequently, on September 19, 2014, FERC granted 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. FERC's declaratory order is included in this EA as **Appendix E**.

Additionally, on June 13, 2014, DOE/FE issued DOE/FE Order No. 3477, in which it granted the portion of Emera's 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. 3477 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. To comply with NEPA, DOE prepared this draft EA for the construction and operation of the CNG facility at the Port of Palm Beach, Florida. This draft EA also examines the No-Action Alternative, under which DOE would not authorize the proposed project, and construction of the CNG facility and the exportation of natural gas would not occur.

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.

1.1 PURPOSE AND NEED FOR DOE ACTION

The high cost of electricity in the Bahamas 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. The Emera parent company, Emera Inc., majority owner of Grand Bahama Power Company (GBPC), 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; the introduction of this fuel to Grand Bahama will facilitate the above-stated commitment. The 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 previously authorized Emera to export CNG from the proposed Emera facility to FTA countries in DOE/FE Order No. 3477. DOE must meet its obligation under Section 3(a) of the NGA to authorize Emera's proposed export of CNG to non-FTA countries unless it finds that the proposed export is not consistent with the public interest. 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 that portion of Emera's Application based on that review. As part of the public interest review, DOE must consider the 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 CNG. In accordance with 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 draft EA fulfills DOE's obligations under NEPA and provides DOE with the information needed to make an informed decision about the proposed action.

This draft EA evaluated the potential individual and cumulative impacts of the proposed project. No other action alternatives were analyzed. For purposes of comparison, this draft EA also evaluated the impacts that could occur if DOE did not authorize the proposed project and the facility was not constructed and the exportation of natural gas did not occur (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 draft 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

Technical Area	Rationale
Aesthetics and Visual Resources	The proposed project is located within the existing industrialized Port of Palm Beach complex and would not significantly alter the local viewshed. 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. 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. 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.

Technical Area	Rationale
Land Use	The proposed CNG facility at the Port of Palm Beach is proposed to occur in areas zoned industrial within which compressing natural gas is typically a permitted use. The project would not conflict with neighboring land uses, land use plans or policies, 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.
Geology, Topography and Soils	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 Palm Beach area. 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.
Community Services	No effects to community services 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. 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.
Cultural Resources	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. Consultations with the Florida State Historic Preservation Officer (SHPO) and the Seminole Nation are ongoing and results of National Historic Preservation Act Section 106 consultation will be included in the Final EA.
Terrestrial Resources	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.

Technical Area	Rationale
Noise and Vibration	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. The compressors and other operation equipment would have relatively low noise and vibration emissions which would not be detected beyond the port facilities. 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.
Transportation	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.
Utilities	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. 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. Consequently, because the impacts associated with the proposed action would be negligible to the overall utilities on and around the Port of Palm Beach this resource was not analyzed further.

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 have been received at this time. Results of consultation will be presented in the Final 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 agencies resource agencies. Comments received by the close of the comment period will be considered in preparing the Final EA for the proposed action and will become part of the official record in **Appendix D**.

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 up to 9.125 Bscf per annum (up to 8 MMscfd initially and with the capability of expanding to load up to 25 MMscfd) of gaseous natural gas via trailers, tank containers, and ocean-going carrier from a facility to be constructed and operated at the Port of Palm Beach, Florida to a facility in Freeport Harbour, Grand Bahama Island. DOE would not be providing funding or financial assistance to this project.

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, Florida to another facility capable of receiving and transmitting CNG at Freeport Harbour, Grand Bahama Island (for the initial phase).

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.

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 Startup, 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
Federal Environmental					
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.
State Environmental					
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	Florida Department of Environmental Protection (FDEP)	Construction and operation of facilities generating air emissions.	Application process.	1 month preparation, 2 to 3 months agency review and approval.	Will coordinate with Port and City of Riviera Beach.
State Operations Permit for Air Emission Facilities	Florida Department of Environmental Protection (FDEP)	Operation of facilities generating air emissions.	Application process.	1 month preparation, 2 to 3 months agency review and approval.	Will coordinate with Port and City of Riviera Beach.
Title V Operating Permit	Florida Department of Environmental Protection (FDEP)	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 (SWPPP)	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 *Operating* 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.
Local Permitting/Approvals					
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; Contractors License, etc.	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.
Other Permits/Approvals					
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 (PHMSA)	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 proposed project. 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. Customers in the Bahamas would pay forecasted higher costs for electricity, and emissions impacts would not be improved.

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; storm water 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 storm water

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).

3.1.2 Environmental Consequences

3.1.2.1 Proposed Project Construction

The proposed CNG facility would be located within an area that is 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, the proposed project would not be constructed and operated at the Port of Palm Beach. 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. The results of the consultation will be included in the Final EA.

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 expects to 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 would not be 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 considers 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 negligible as a result of project operations.

3.2.2.3 No-Action Alternative

Under the No-Action Alternative, the proposed project would not be constructed and operated at the Port of Palm Beach. 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_2), ozone (O_3), sulfur dioxide (SO_2), and two categories of particulate matter (PM_{10} and $PM_{2.5}$ 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) Climate Change 2013 The Physical Science Basis report 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_2), methane (CH_4), nitrous oxide (N_2O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF_6). The burning of fossil fuels including diesel, gasoline, and natural gas emit CO_2 and CH_4. 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_2 and CH_4.

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. 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, the proposed project would not be constructed and operated at the Port of Palm Beach. 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, the proposed project would not be constructed and operated at the Port of Palm Beach. 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 socioeconomics 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)

	Palm Beach County Employment Estimate 2008-2012	City of Riviera Beach Employment Estimate 2008-2012
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, the proposed project would not be constructed and operated at the Port of Palm Beach. 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 would be 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 would 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 explosive 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, the proposed project would not be constructed and operated at the Port of Palm Beach. 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. 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)

	One Mile Radius of Project Site	Percent (%)	City of Riviera Beach	Percent (%)	Palm Beach County	Percent (%)
Total Population	8,468		32,488		1,320,134	
Minority	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, the proposed project would not be constructed and operated at the Port of Palm Beach. 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 potentially 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 Port of Palm Beach 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. **Table 4-1** summarizes these projects.

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

EA Section	Project	Description	Cumulative Impacts associated with the Emera Project	Status
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

EA Section	Project	Description	Cumulative Impacts associated with the Emera Project	Status
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

4.1.1 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 encouraging 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.

4.2 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

The DOE has prepared this draft EA to evaluate the potential environmental impacts that would occur as a result of the construction and operation of a CNG facility. The proposed action includes a facility at the Port of Palm Beach, Florida for the purpose of compressing and exporting up to 9.125 Bscf per annum (up to 8 MMscfd initially and with the capability of expanding to load up to 25 MMscfd) of gaseous natural gas via trailers, tank containers, and ocean-going carrier to a facility constructed and operated at Freeport Harbour, Grand Bahama Island (for the initial phase) and other potential markets (in future phases). The initial phase of the project would expect to stabilize electricity costs and lower emissions related to electricity production for customers in Grand Bahama. The Port of Palm Beach facility may also be used in the future to export CNG to other countries not prohibited by U.S. law or policy. This EA also evaluates the No-Action Alternative, under which Emera would not be authorized to construct the proposed project and would not export natural gas from the Port of Palm Beach.

DOE evaluated 15 resource areas for potential impacts associated with the proposed project. After preliminary evaluation, it was determined that there would be 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. 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 this project, 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.

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Figures

Emera

North

Scale in Miles

0 31.5

Compressed Natural Gas (CNG) Environmental Assessment (EA)

Figure 2.1 | Port of Palm Beach Regional Location Map

Emera

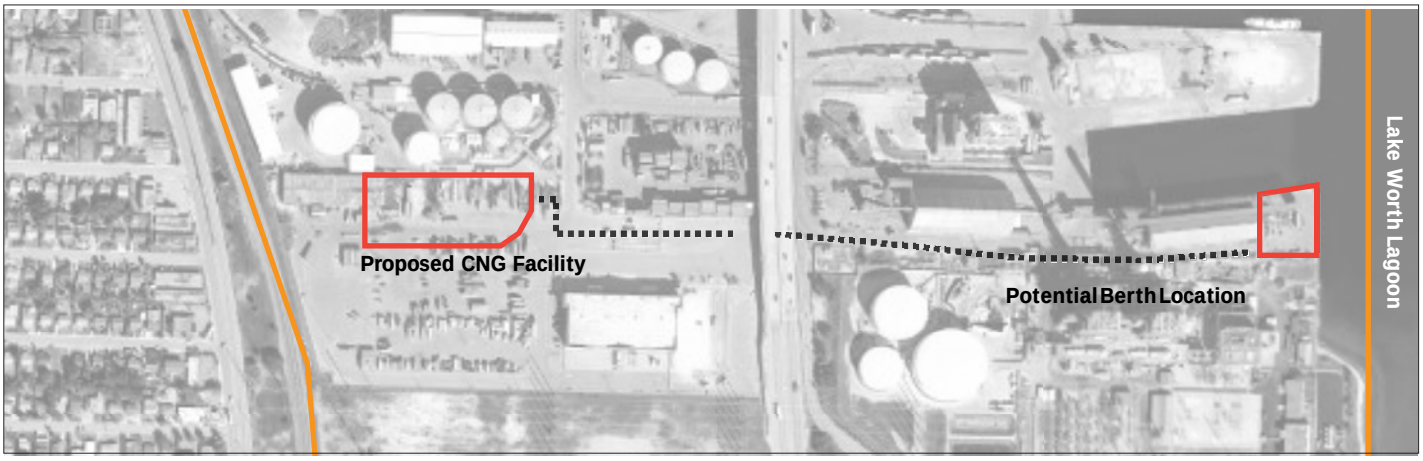
North

Scale in Feet

0 1400

Compressed Natural Gas (CNG) Environmental Assessment (EA)

Figure 2.2 | Proposed CNG Facility to Vessel Delivery Route



Emera

North

Scale in Feet

0 600

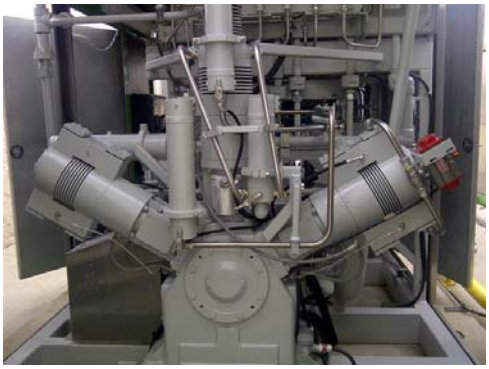
Compressed Natural Gas (CNG) Environmental Assessment (EA)

Figure 2.3 | Proposed CNG Lease Area Existing Conditions

Dryer Package

Fill Post

Twin Compressor Package

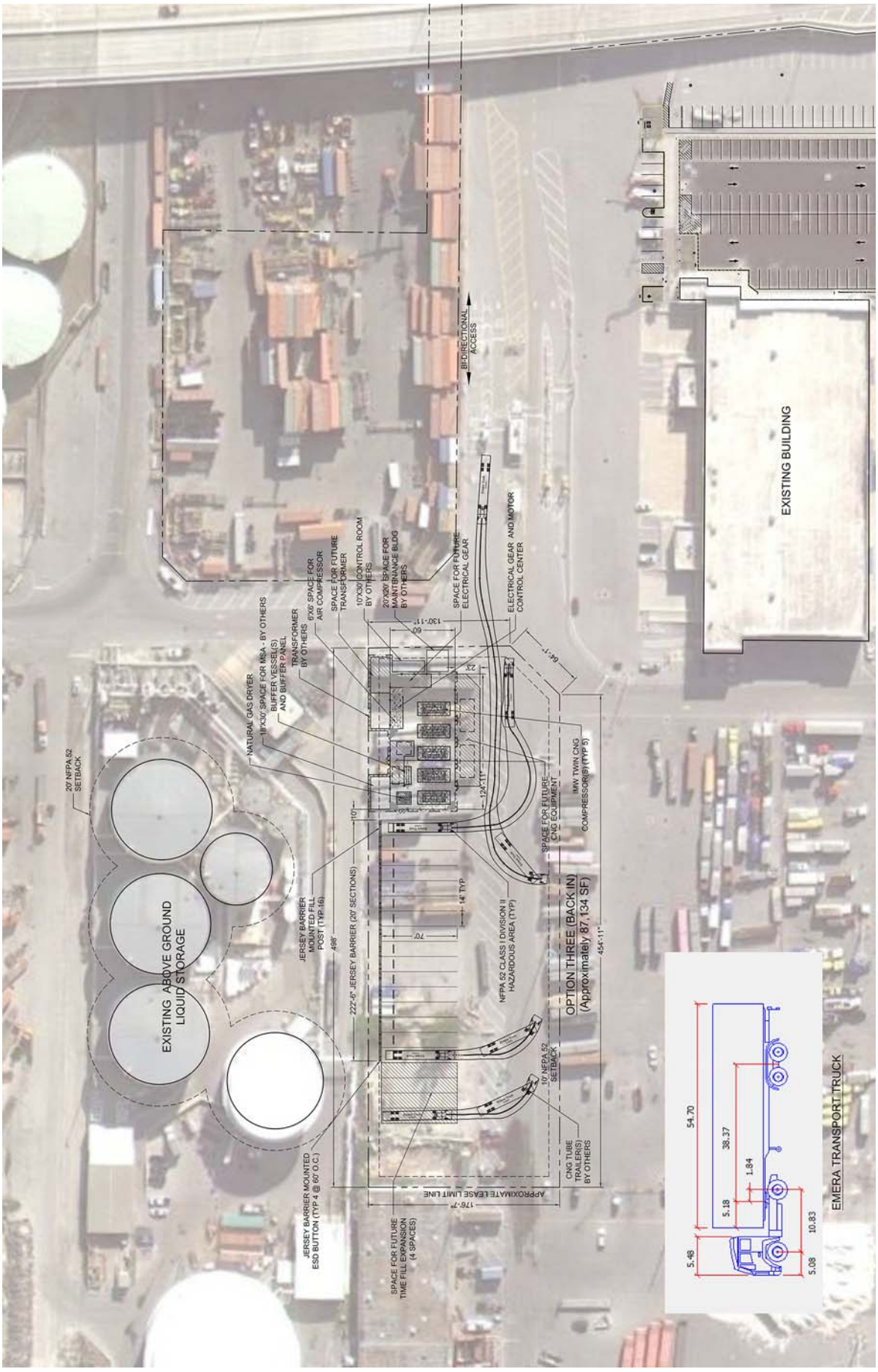


View of Compressor inside enclosure

Dryer Package 2

Fill Post

Truck Filling Station



Emera

North

Scale in Feet

0 80

Compressed Natural Gas (CNG) Environmental Assessment (EA)

Figure 2.5 | Preliminary CNG Facility Layout

Emera

North

Scale in Miles

0 15

Compressed Natural Gas (CNG) Environmental Assessment (EA)

Figure 2.6 | Freeport Regional Location Map

Emera

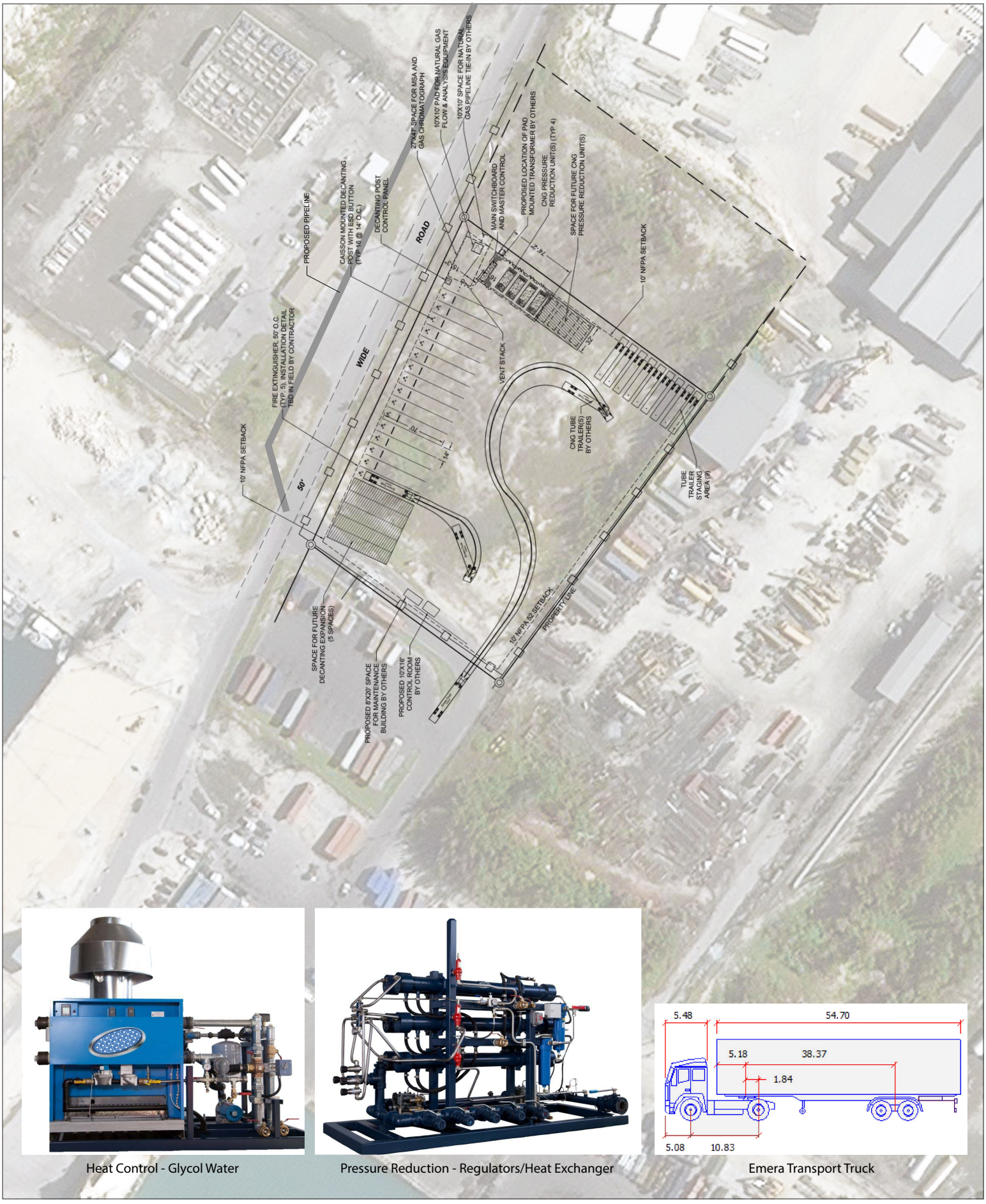
North

Scale in Feet

0 600

Compressed Natural Gas (CNG) Environmental Assessment (EA)

Figure 2.7 | Freeport Harbour Facility Project Location Map



Heat Control - Glycol Water

Pressure Reduction - Regulators/Heat Exchanger

Emera Transport Truck

North

Scale in Feet

0 80

Compressed Natural Gas (CNG) Environmental Assessment (EA)

Figure 2.8 | **Freeport Harbour** Preliminary CNG Facility Layout

Emera

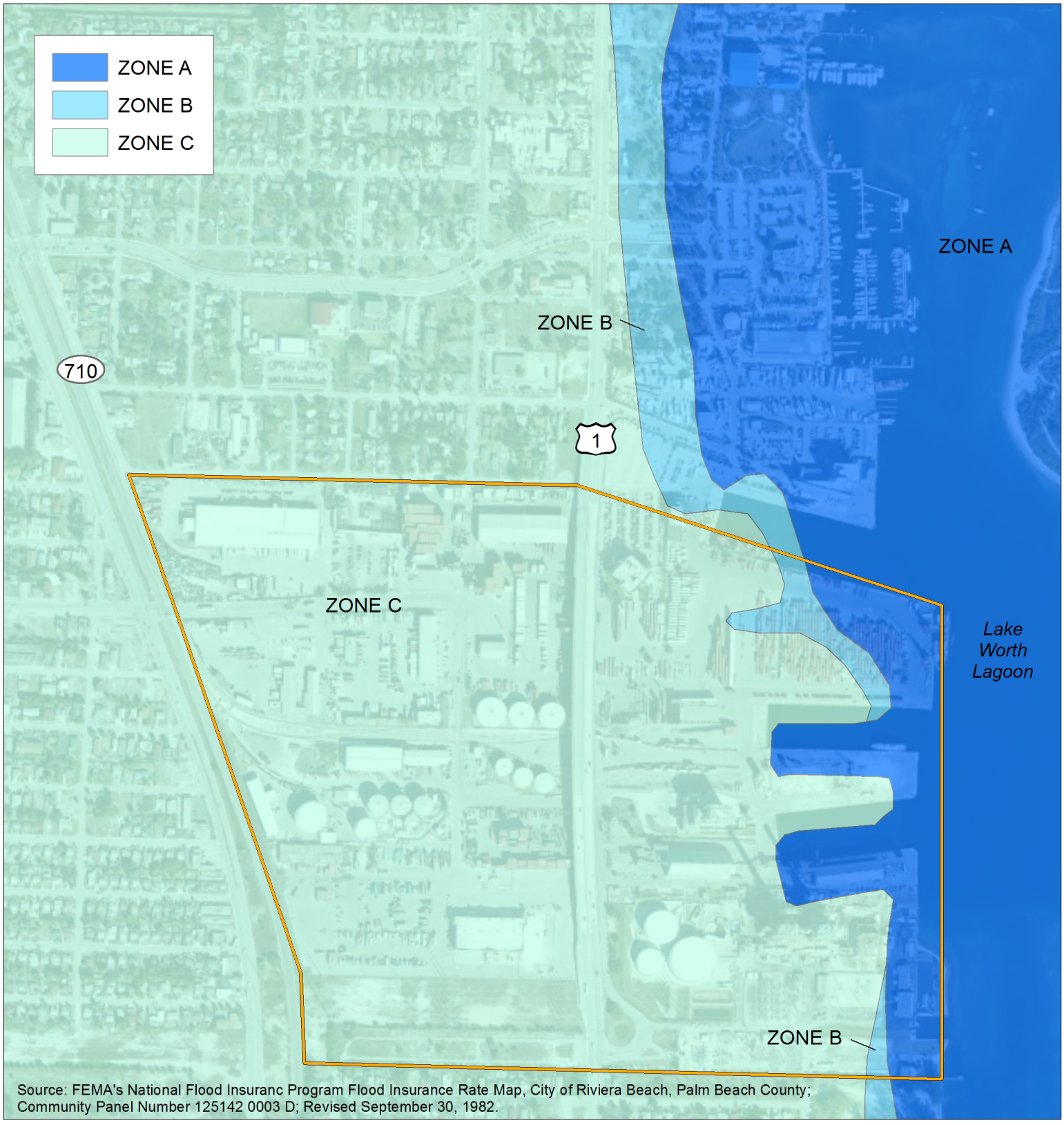
North

Scale in Feet

0 500

Compressed Natural Gas (CNG) Environmental Assessment (EA)

Figure 2.9 | Freeport Harbour Proposed Pipeline Layout



Source: FEMA's National Flood Insuranc Program Flood Insurance Rate Map, City of Riviera Beach, Palm Beach County; Community Panel Number 125142 0003 D; Revised September 30, 1982.

Emera

North

Scale in Feet

0 600′

Compressed Natural Gas (CNG) Environmental Assessment (EA)

Figure 2.10 | Flood Zones

APPENDIX A

Distribution List

Distribution List
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APPENDIX B

Correspondence and Agency Consultation

NATIONAL ENERGY TECHNOLOGY LABORATORY
Albany, OR • Morgantown, WV • Pittsburgh, PA

U.S. DEPARTMENT OF ENERGY

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

Sincerely,

Fred E. Pozzuto
Environmental Manager / NEPA Compliance Officer

Attachments

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

Emera

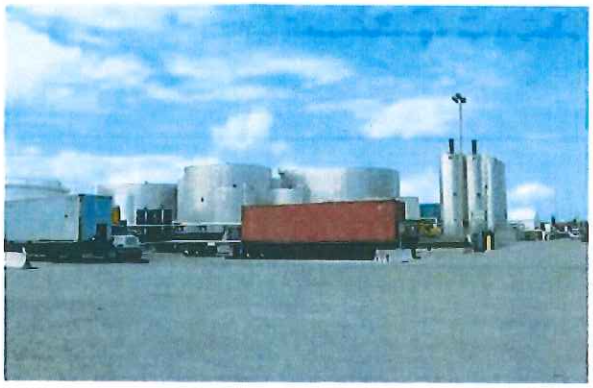
North

Scale in Feet

0 600

Compressed Natural Gas (CNG) Environmental Assessment (EA)

Figure 1 | Proposed CNG Facility to Vessel Delivery Route

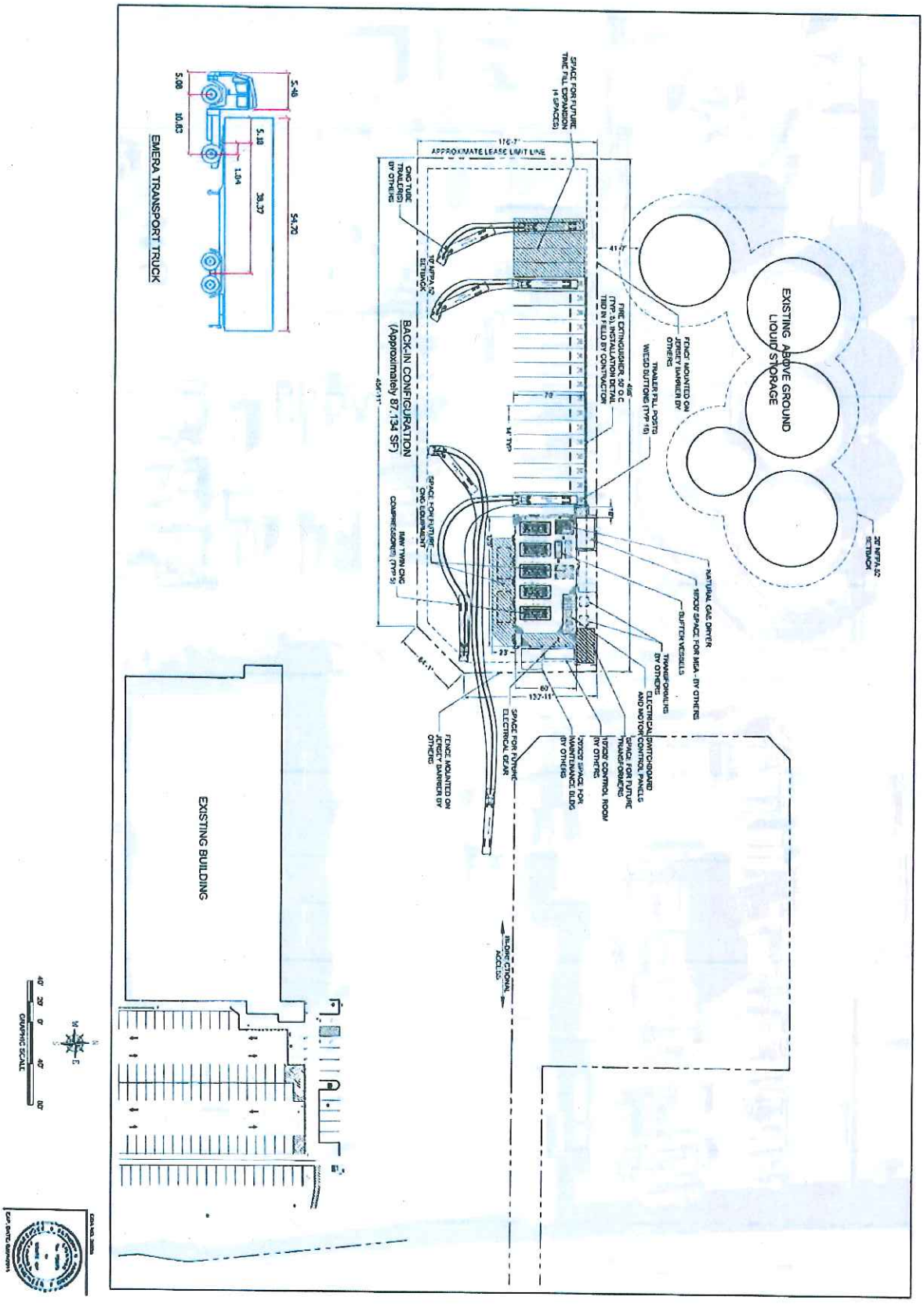


Emera

North

Scale in Feet
0 600

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



Emera

North

Scale in Feet

0 100

Compressed Natural Gas (CNG) Environmental Assessment (EA)

Figure 3 | Clean Energy Fueling Station

October 15, 2014

Mr. David Keys, SERO NEPA Coordinator
NOAA Fisheries Service, Southeast Regional Office
263 13th 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

Sincerely,

Fred E. Pozzuto
Environmental Manager / NEPA Compliance Officer

Attachments

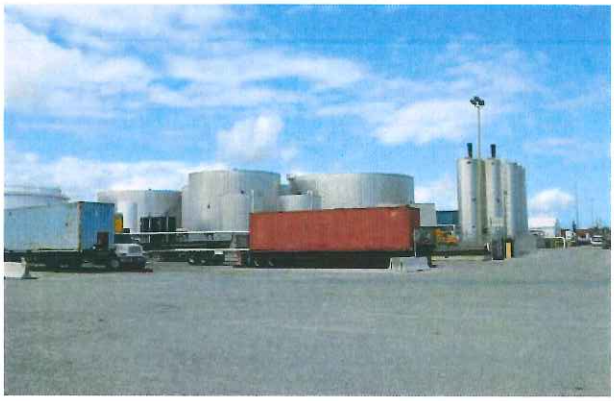
CF: (w/attachments):
Emera (D. McLellan)
AECOM (K. Peterman)
DOE-HQ (J. Anderson)

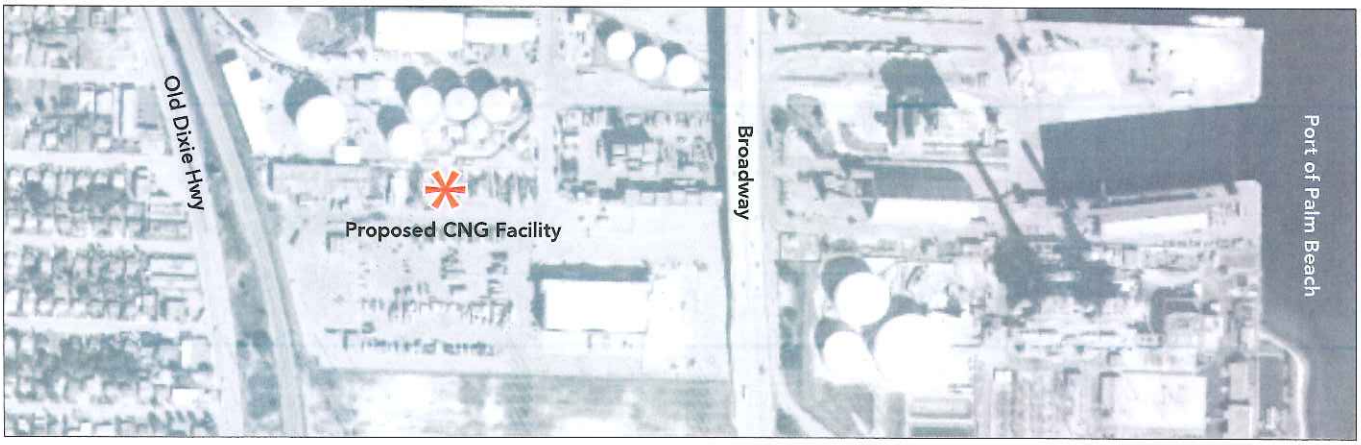
Emera

North

Scale in Feet
0 600

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



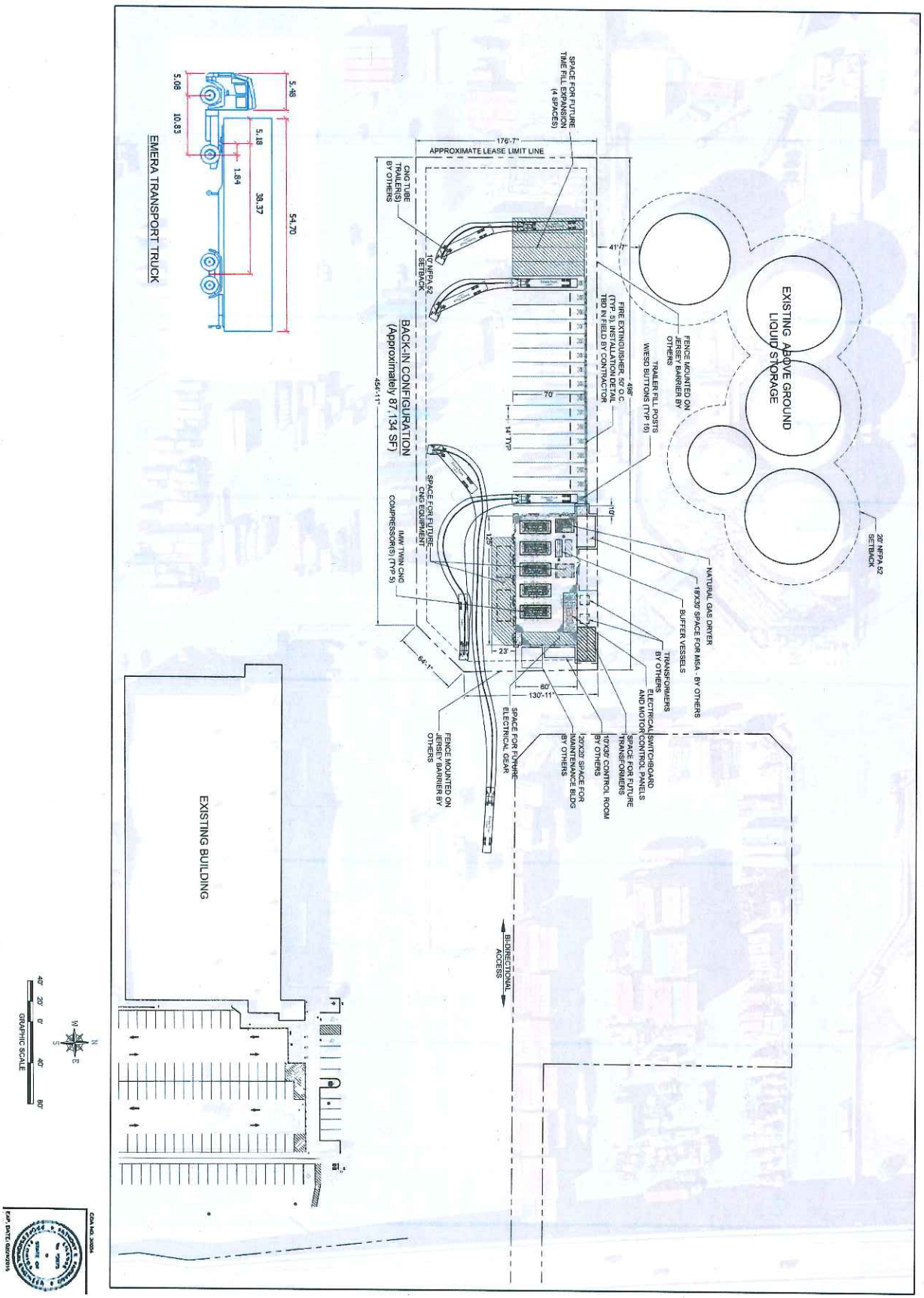


Emera

North

Scale in Feet
0 600

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



Emera

North

Scale in Feet
0 100

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

APPENDIX D

Public Comments Received

No public comments have been received to date.

Public comments will be included in the Final EA.

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[1] 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).[2]

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.[3] Timely motions to intervene were filed by Floridian Natural Gas Storage Co., LLC (Floridian) and Pivotal LNG, Inc.[4] Floridian filed a protest, to which Emera submitted an answer. Although the Commission's Rules of Practice and Procedure do

[1] 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).

[2] 15 U.S.C. § 717, *et seq*. (2012).

[3] 79 Fed. Reg. 17,528 (Mar. 28, 2014).

[4] 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,[5] 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.[6] 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.[7] 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.[8]

[5] Rule 213(a)(2), 18 C.F.R. § 385.213(a)(2) (2014).

[6] *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.

[7] Floridian's April 18, 2014 Motion to Intervene at 10.

[8] 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[9] 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.[10] Emera plans to receive natural gas at its planned compression facility from the Riviera Lateral, a pipeline owned and operated by Peninsula Pipeline Company.[11] Emera comments that although the

[9] 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.

[10] 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.

[11] 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.[12] 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

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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.

[12] 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).[13]

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

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[13] 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.[14]

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.[15] 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

[14] Floridian's *Motion for Leave to Intervene and Comments* at 10.

[15] *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. [16]

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 EPAct 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."[17] We further note that the fact that this Commission does

[16] 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.

[17] 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.[18] 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.[19]

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.[20]

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[18] 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.

[19] 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.

[20] 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.[21] 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

[21] *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. [22]

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.

[22] 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.

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Norman C. Bay
Commissioner