

25 SEPTEMBER 2018

LNG FUEL SUPPLY IN THE NORTH AND CONVERSION OF SAN JUAN UNITS 5 & 6 TO NATURAL GAS PROJECT

PROPOSAL FOR: PUERTO RICO ELECTRIC POWER AUTHORITY

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AEE_3071

LETTER FROM WES EDENS



September 25, 2018

Mr. José Ortiz, Executive Director & CEO Puerto Rico Electric Power Authority P.O. Box 364267 San Juan, Puerto Rico 00936

Re: RFP 81412: Request for Proposals for Fuel Supply in the North and Conversion of San Juan Units 5 and 6, issued by the Puerto Rico Electric Power Authority

Dear Director Ortiz:

New Fortress Energy is pleased to present a proposal for the turnkey conversion of San Juan Units 5 & 6 and a guaranteed supply of natural gas to the power plant. We have reviewed PREPA's RFP closely and believe that a conversion to natural gas offers significant benefits – including cost, safety and environmental – over alternative fuels such as diesel or LPG. Over the 5-year base term of the contract, our solution delivers an estimated \$1.3bn of savings versus expected diesel prices. At a savings of approximately \$24mm per month, the benefits to Puerto Rico of immediate action are evident. We have a very clear view of the infrastructure, permits and logistics for this project, and our solution can be operational by the end of March 2019.

Our offer to supply natural gas is simple. PREPA's fuel price will be based on Henry Hub and decline annually over the 5-year term. The average fuel price of our offer is ~\$10.10 per MMBtu for natural gas, which is the equivalent of \$1.40 per diesel gallon vs. today's delivered price in San Juan of over \$2.40 per gallon. PREPA would have the ability to extend the contract for three additional 5-year periods, for a total of 20 years.

Term	5 years extendable for three 5-year periods
Base Index	Henry Hub x 115%
+ Unit Cost	<u>\$7.10</u> per MMBtu average over the base 5-year term
Year 1 Unit Cost	\$8.50 per MMBtu
Year 2 Unit Cost	\$7.50 per MMBtu
Year 3, 4 and 5 Unit Cost	\$6.50 per MMBtu

Importantly, our proposal is <u>not</u> contingent on third party financing, which offers additional assurances that we can meet the schedule outlined in our proposal and ensures that savings can begin quickly.

As you know, we have invested significantly in the development of a micro fuel handling facility to import liquefied natural gas (LNG) in San Juan and deliver natural gas to customers throughout Puerto Rico. We will supply natural gas to PREPA from this facility, which is located immediately adjacent to the San Juan Power Plant on land that we control under a 20-year long-term lease with the Puerto Rico Ports Authority. We have worked closely with federal regulators to ensure compliance and on-time delivery of the facility. Our facility was designated as a Strategic Project by the Government of Puerto Rico under Act 19, which enables us to offer the accelerated execution timeline in our proposal.

The delivery of natural gas to San Juan will allow for the additional development of modern generation projects that can accelerate the transition from distillate fuels and result in billions of dollars in fuel savings, sharply lower electricity prices and a much friendlier environmental footprint. In Jamaica, we undertook a very similar effort, and the results have been transformative. Two years ago, nearly 100% of Jamaica's electricity generation was oil-based; two years from now nearly all generation will be natural gas-fired or renewable. Consumer energy prices are decreasing, and environmental conditions are vastly improving. Moody's upgraded the country last November, citing the adoption of LNG as a driver. We expect even better results in Puerto Rico.

Our team, our equipment and our world-class partners, such as Mitsubishi Hitachi Power Systems, Black & Veatch, and Moffatt & Nichol, have proven track records for similar projects and applications throughout the world. Mitsubishi Hitachi Power Systems, the LTSA provider and chosen contractor, has provided us with a schedule that will complete the conversion by March 2019. In order to hit this timeline, we have engaged the best-in-class local partners who will provide valuable experience and insight to the project execution team.

I founded US-based New Fortress Energy to fund, develop and drive the world's transition from oil-based fuels to natural gas and renewables. I travelled to Puerto Rico just days after hurricane Maria last September to see how we could assist in the recovery and rebuilding of the Island's energy infrastructure. We are hopeful that our proposal will contribute to that effort and be a meaningful step towards a more sustainable, secure energy future for Puerto Rico. Our entire team is ready to work closely with yours to discuss our proposal and begin what we hope will be a long-term partnership. We look forward to hearing from you soon.

All the best,

Wes Edens CEO & Founder New Fortress Energy Holdings LLC Co-CEO & Co-Founder Fortress Investment Group LLC

PROPOSAL HIGHLIGHTS

Proposal Highlights

KEY ITEMS	HIGHLIGHTS
Proponent	NFEnergía LLC, a Puerto Rico limited liability company and a wholly owned subsidiary of New Fortress Energy Holdings LLC and an affiliate of Fortress Investment Group LLC (NFE), a leading, highly diversified global investment manager with approximately \$41 billion of assets under management as of June 30, 2018; NFE and its affiliates have invested over \$25 billion in transportation, infrastructure, and energy assets worldwide since 2001.
LNG Experience	NFE has completed or is currently developing over \$2.5 billion of LNG related assets worldwide. NFE currently operates LNG liquefaction facilities, small- scale LNG receiving terminals, world-scale LNG receiving terminals, power plants, and distributed energy solutions in the region; NFE was the first to export LNG from the US lower 48 to a non-FTA country.
Price / Offer	Annual Capacity Payment: \$10 million for the 5-year base term of the contract Unit Cost: \$7.10 per MMBTU average Unit Cost (Unit Cost schedule detailed in Section 3.1) Index for changes in Unit Cost: Henry Hub x 115%
5-year NPV Cost Savings	\$1.3 billion (est.) over the 5-year base term of the contract
Schedule	Conversion of San Juan Units 5 & 6 to be capable of burning natural gas by March 2019.
Infrastructure	Natural gas delivered via NFE's micro-fuel handling facility located in Puerto Nuevo Section of San Juan Harbor immediately adjacent to the San Juan Power Station.
Real Estate	Long-term lease with Puerto Rico Ports Authority for land in Puerto Nuevo Section of San Juan Harbor immediately adjacent to the San Juan Power Station, and space at Wharf C to conduct natural gas operations, including berth space for our LNG carrier.
Permissions	Strategic Project Certification (COMPLETE) Micro-fuel handling facility environmental assessment (COMPLETE) US Customs & Border Protection – "Jones Act" – letter (COMPLETE) US Coast Guard Letter of Recommendation Submissions (COMPLETE)
Partners	World-class partners for engineering, design, construction, and project execution, including Mitsubishi Hitachi Power Systems, Black & Veatch, Moffatt & Nichol in addition to many outstanding local partners.
Technology	Commitment from Mitsubishi Hitachi Power Systems to subcontract with NFE for the turnkey engineering, supply, installation, commissioning, and testing of the natural gas conversion project.
Safety and Reliability	Mitsubishi Hitachi Power Systems has recommended to NFE the use of LNG over LPG as the fuel of choice for San Juan 5 & 6 because of, among other things, the safety risks inherent in using LPG in this application.
Optimization [Optional]	Because of the close proximity of NFE's micro-fuel handling facility to San Juan Power Station, Mitsubishi Hitachi Power Systems has provided NFE an <u>option</u> to integrate "inlet cooling" with the conversion project, adding additional capacity.

RFP REQUIREMENTS & RESPONSES CHECKLIST

RFP Requirements and Responses

The table below identifies where in the proposal document the requested information can be found.

RFP Description	RFP Page Number	Proposal Section Number and Title	Proposal Page Number
Evaluation and Selection Criteria Overview:			
Experience and Capacity	14	1.0 NFE Experience and Capacity	1-1
Approach and Methodology	15	2.0: Introduction, Approach and Methodology	2-1
Price Proposal	16	3.0 Price Proposal	3-1
Detailed RFP Cross Reference Chart:			
Land property necessary for fuel unloading, storage and handling facility	8	2.1.4 Ownership or Control of Location	2-7
US Coast Guard Authorization, as required	8	Table 4-1 NFE Steps Completed Toward Issuance of United States Coast Guard Letter of Recommendation	4-1
Bidder must be able to demonstrate a clear path for achieving approval of all necessary permits required for the construction and operation of the project including appropriate harbor access and approvals	8	4.1 Permitting Path and Matrix	4-1
Contractor must supply all supply, construction and commissioning of all equipment and interconnection necessary for a complete unloading, storage and fuel handling terminal facility as necessary to receive, unload and store LNG and to vaporize and deliver natural gas to the existing San Juan Units 5 and 6 Power Generating Plant.	8	2.1 Project Scope of Work Description	2-1
If alternative fuel is proposed, Contractor shall be responsible for the installation of all necessary facilities to deliver the fuel to Units 5 and 6.	8	2.1.5 Alternative Fuel	2-12
Contractor shall supply the supply and delivery of LNG on regular intervals as necessary to support San Juan Units 5 and 6 consumption of approximately 25 TBTU/yr	8	2.3.2 LNG Storage and Transfer – San Juan LNG Delivery	2-17
Contractor must supply logistics necessary to achieve reliability of LNG supply for a term of at least 5 years with three separate five-year extensions at PREPA's sole discretion.	8-9	2.3.2 LNG Storage and Transfer	2-15
Operation and maintenance for duration of contract of all LNG, or alternative fuel, terminal and interconnection facilities required to	9	2.3.1 LNG Delivery Operations and Equipment	2-14

RFP Description	RFP Page Number	Proposal Section Number and Title	Proposal Page Number
provide reliable and safe delivery of natural gas			
at the quantities described above to the battery			
limits of the San Juan Units 5 and 6 generating			
plant.			
Contractor shall be responsible in supplying all			
materials, equipment and personnel to fulfill		2.3.1 LNG Delivery	
the project within the scope of supply, starting	9	Operations and	2-14
from LNG unloading terminal and ending at the		Equipment	
combustion turbine nozzle inlet.			
The engineering shall consider transient loads		2.2.1.4 Transient Load	
management solution due to potential load	9		2-13
fluctuations of the units.		Management	
Shipping, supply, operating associated with LNG		2 2 1 LNC Delivrowy	
delivered to the terminal and for the natural gas	9	2.3.1 LNG Delivery	2-14
supply from the terminal to San Juan 5 and 6	9	Operations and	2-14
shall be part of Contractor's responsibility.		Equipment	
The Contractor shall be responsible for the			
scope of work and associated capital cost		2.2 Power Plant	
required for LNG gas conversion of PREPA's San	9	Conversion	2-12
Juan Units 5 and 6, as well as modifications to		Conversion	
associated turbine controls			
The Contractor shall include the cost of the			
scope for PREPA's Unit 5 and 6 conversion as			
part of its proposal in the form of a capacity	9	3.0 Price Proposal	3-1
payment over the initial Base five (5) year term			
of the Agreement			
The Contractor shall oversee and manage the			
conversion work with appropriate subcontracts			
to the combustion turbine original equipment			
supplier company, Mitsubishi, who will be		Exhibit 20 Power Plant	
responsible for defining the scope for the	9	Division of Responsibility	Exhibit 20
turbine's gas conversion and turbine controls		Division of Responsibility	
modifications including engineering/design,			
equipment supply and technical advisors for			
construction and startup.			
The Contractor shall be responsible for		2.4.7 San Juan Power	
coordinating outage planning with PREPA to	9	Plant Area Execution Plan	2-32
implement the necessary modifications.		T faile Ai ca Execution T fail	
The Contractor will optimize the conversion of		2.2.1.2 CT Inlet Air	
Units 5 and 6 to achieve commercially	9	Chilling (detail on this	2-13
reasonable improvements in output and heat)	option)	2-15
rate in conjunction with the conversion		optionj	
Mitsubishi shall be a sole source subcontractor			
to the Contractor, and Mitsubishi shall be		Exhibit 20 Power Plant	
responsible for engineering, supply, technical		Division of Responsibility	Exhibit 20
advising/installation oversight and	9-10		
commissioning associated with the conversion		Exhibit 26 Mitsubishi	Exhibit 26
of San Juan 5 and 6, including but not limited to		Letter	
the list on page 9-10 of the RFP			
Contractor will be responsible for separately	10	1.5.3 Engineer – Black &	1-20
subcontracting to a qualified Engineer to	10	Veatch	1-20

RFP Description	RFP Page Number	Proposal Section Number and Title	Proposal Page Number
perform all Balance of Plant design engineering beyond the scope of Mitsubishi but as necessary to accomplish the conversion of San Juan Units 5 and 6, including but not limited to the list on page 10 of the RFP	Number		Number
All equipment and materials installed by contractor from the regasification point to the units shall become PREPA's property from the Final Acceptance date.	10	Exhibit 32 NFE Draft of Terms and Conditions	Exhibit 32
The Contractor shall be responsible for studies, permits and endorsements from the United States Coast Guard, Puerto Rico Ports Authority, Public Service Commission, Department of Natural Resources, NOAA and PR Environmental Quality Board, Federal Energy Regulatory Commission, US National Fish and Wildlife, and other applicable agencies for LNG shipping terminal and storage works outside San Juan Power Plant perimeter and for assisting PREPA with such studies and permits as necessary to convert San Juan Units 5 and 6.	10	4.1 Permitting Path and Matrix	4-1
The Contractor shall be responsible for all interfaces with the Puerto Rico Ports Authority (PRPA) and its proposal shall include a letter of support from the PRPA.	10	Exhibit 34 Puerto Rico Ports Authority Letter of Support	Exhibit 34
Scope of Work, not limited to:	10		
Gas Piping: The use of SOCOIN natural gas piping and route designed for the SJ Combined Cycle shall be considered, but the final design will be determined by the Contractor in accordance with applicable standards.	10	Section 2.1 Project Scope of Work and Description	2-1
Dedicated Auxiliary Equipment's: Control Valves, Gas Evaporator, Heater or Heat Tracer and Compressor to comply with combustion turbine's manufacturer recommendations, Relief Valves, Stop Valves, Safety Vent Valves, Safety Shut Down Valve at fuel gas turbine manifold, Overspeed Trip Valve, Fuel Gas Meter, Metering Station for Financial Custody, Coalescent Filters, etc	10-11	Section 2.1 Project Scope of Work and Description	2-1
The Contractor is responsible of any improvements required to the dock per NFPA, Ports Authority and USCG compliance and for the recertification due to the change of use.	11	Section 2.1 Project Scope of Work and Description	2-1
Contractor shall not interfere with current operations for unloading and storing Bunker C fuel oil or diesels fuel at any the existing PREPA San Juan Steam Plant generating facilities	11	2.4.7 San Juan Power Plant Area Execution Plan	2-32

RFP Description	RFP Page Number	Proposal Section Number and Title	Proposal Page Number
Electronics and Communications: for all operation, control and supervisory signals from auxiliary equipment, gas conveyance,	Number		Number
metering station and LNG storage and vaporizer system shall be integrated to the San Juan Units 5and6 DCS by means of dedicated fiber optic conduits and cables	11	Section 2.1 Project Scope of Work and Description	2-1
Coating: All steel surfaces shall be painted with a three coating system for corrosive environment and UV protected	11	Section 2.1 Project Scope of Work and Description	2-1
Fuel Gas Meters: The Two separate flow meters shall be installed including a main meter and a backup meter. The metering equipment will be installed in a location to be mutually agreed to by the Contractor and PREPA. The metering equipment shall be designed and installed in accordance with the current recommendations of the American Gas Association	11	Section 2.1 Project Scope of Work and Description	2-1
NDT to all welds; 100% x-Rays, hydrostatic test	11	Section 2.1 Project Scope of Work and Description	2-1
Cathodic Protection	11	Section 2.1 Project Scope of Work and Description	2-1
Fire protection system modification as required by codes and local and federal regulatory agencies	11	Section 2.1 Project Scope of Work and Description	2-1
Gas leak Sensors w/heat and temperature sensors	11	Section 2.1 Project Scope of Work and Description	2-1
Mechanical, Electrical, Structural and Civil Works	11	Section 2.1 Project Scope of Work and Description	2-1
Construction Drawings	11	Section 2.1 Project Scope of Work and Description	2-1
As Built Drawings	11	Section 2.1 Project Scope of Work and Description	2-1
Construction shall consider hurricane winds of 145 MPH and comply with Seismic User Group 3	11	Section 2.1 Project Scope of Work and Description	2-1
Combustion turbine manufacturer's Recommendation of Natural Gas Parameter at Combustion Turbine's Gas Control Skid (Pressure 350-650 psi, Temperature 60 F, Flow 27.43 MMBtu/min per unit)	12	Section 2.1 Project Scope of Work and Description	2-1
Volume nominations: Each year, PREPA will provide an annual quantity nomination to be supplied to the San Juan Units 5 and 6. Contractor will commit to providing this total quantity in accordance with the schedule to be provided by PREPA.	12	Exhibit 32 NFE Draft of Terms and Conditions	Exhibit 32

RFP Description	RFP Page Number	Proposal Section Number and Title	Proposal Page Number
Minimum terminal LNG storage to be maintained at all times: 7 days of storage for San Juan Units 5 and 6 at full load	12	2.3.2 LNG Storage and Transfer Table 2-1 NFE Shipping Assets	2-15 2-17
Guaranteed delivery. Contractor is responsible for providing 100% of the San Juan Units 5 and 6 natural gas supply in accordance with the annual quantity nomination	12	Exhibit 32 NFE Draft of Terms and Conditions	Exhibit 32
If natural gas is not available as specified by PREPA, Contractor may be required to supply diesel fuel to operate the units or alternatively to reimburse PREPA for the difference between their cost of diesel fuel consumed minus the contract price of natural gas and any other costs associated to this change	12	2.1.5 Alternative Fuel	2-12
If the natural gas available does not conform to the quality specifications described in the combustion turbine manufacturer's specifications, the natural gas supply shall be deemed unavailable and the abovementioned Contractor's responsibility will apply	12	Exhibit 32 NFE Draft of Terms and Conditions	Exhibit 32
Security –Bidder shall propose a security acceptable to PREPA to guarantee its performance under the contract and provide terms which would allow step-in rights in the event of non-performance	12	5.2 Financial Ability and related Exhibits Exhibit 32 NFE Draft of Terms and Conditions	5-1 Exhibit 32
Scope of work for the total project	12	2.1 Project Scope of Work Description	2-1
Schedule	12	Figure 4 CPM Schedule	2-2
Operating Plan	13	2.3 LNG Delivery & Natural Gas Fuel Supply Logistics and Operations	2-14
Location(s)	13	2.1.3 Proposed Project Location and Siting 2.1.4 Ownership or Control of Location	2-5 2-7
Permitting plans (if applicable)	13	4.1 Permitting Plan and Matrix	4-1
Plans for financing, schedule, requirements and demonstration of commitments to financing. Note: Proponent proposal will not be accepted if conditioned on approval of financing. Proponent must be able to demonstrate existing unconditional commitments to financing for the project.	13	5.2 Financial Ability and related Exhibits	5-1
Supply contract terms (if applicable)	13	Exhibit 32 NFE Draft of Terms and Conditions	Exhibit 32
Scope of work for the total project including permitting	13	4.1 Permitting Plan and Matrix	4-1

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RFP Description	RFP Page Number	Proposal Section Number and Title	Proposal Page Number
Schedule for scope of work to support delivery of natural gas	13	Figure 4 CPM Schedule	2-2
Schedule for scope of work to accomplish conversion of San Juan Units 5 and 6	13	Figure 4 CPM Schedule	2-2
Long term operating plan for gas unloading and supply facility	13	2.3 LNG Delivery & Natural Gas Fuel Supply Logistics and Operations	2-14
Location of facility	13	2.1.3 Proposed Project Location and Siting 2.1.4 Ownership or Control of Location	2-5 2-7
Source of LNG supply and delivery logistics, including reliability contingency, as needed to support full load continuous reliable operation of San Juan Units 5 and 6	13	2.3.2 LNG Storage and Transfer	2-15
Storage and redundancy in equipment systems as necessary to assure reliable fuel supply to the power generating units	13	2.3.1.2 Liquefied Natural Gas Ships & Major Equipment and 2.3.3 LNG Vaporization Overview	2-14 2-18
Ownership structure	13	1.5 Ownership Structure & Project Team Introduction	1-14
Order of magnitude estimated capital cost required for total investment	13	5.1 Capital Cost Estimate	5-1
Plans for financing, schedule, requirements and demonstration of commitments to financing. Note: Bidders proposal will not be accepted if conditioned on approval of financing. Bidder must be able to demonstrate existing unconditional commitments of financing for the project.	13	5.2 Financial Ability and related Exhibits	5-1
Pricing and applicable indices	13	3.0 Price Proposal	3-1
Plans for control/ownership of proposed location for fuel unloading facility	13	2.1.4 Ownership or Control of Location	2-7
Evidence that Contractor currently owns/controls any ships, vessels or major equipment necessary to execute the project as scheduled including initial fuel delivery	13	2.3.2 LNG Storage and Transfer	2-15
Recommendation of current or recent customer for similar services as proposed	13	1.4 Client References & Letters of Recommendation	1-11
Letter of Support from Puerto Rico Ports Authority or as established on Part VI. Studies and Permits	13	Exhibit 34 Puerto Rico Ports Authority Letter of Support	Exhibit 34
Demonstration of Jones Act compliance	13	Exhibit 33 Evidence of Jones Act Compliance	Exhibit 33

RFP Description	RFP Page Number	Proposal Section Number and Title	Proposal Page Number
Permitting path and permit request/approval matrix	13	4.1 Permitting Path and Matrix	4-1
Scope split document for all work (including San Juan 5 and 6 conversion) demonstrating scope by all major subcontractors to Bidder including Mitsubishi, Bidder's Engineer, and Bidders Construction Contractor(s)	13	Exhibit 20 Power Plant Division of Responsibility	Exhibit 20
Subcontractor Commitment letter from Mitsubishi to perform scope for conversion of San Juan 5 and 6	13	Exhibit 26 Mitsubishi Letter	Exhibit 26
Proposed Engineer for BOP scope	13	1.5.3 Engineer – Black & Veatch	1-20
Proposed Construction Contractor(s) and respective scope	13	1.5.4 Contractor – TSK	1-21
Experience and Capacity Criteria:			
Respondents must demonstrate experience and success in developing LNG fuel developments of similar scope as the duties described herein.	14	1.2 Qualifications and Experience	1-2
Proponents shall provide the names and titles of the key members of the Project team (including the Design Entity selected by the Proposer) with a brief description of the qualifications and experience of Project Manager, Engineering and Design Manager, Lead Engineers, Inspector Manager, Safety Officers, QA/QC Managers, Environmental Specialists, and other key personnel required, including subcontractors	14	 1.5 Ownership Structure & Project Team 1.5.1 NFE Project Management Team 	1-14 1-16
Proponents shall include a clear assignment of responsibility for various project tasks to specific individuals	14	1.5 Ownership Structure & Project Team	1-16
Proposals shall include resumes identifying the qualifications and experience of all personnel listed above.	14	Exhibits 4, 6 and 8	Exhibits 4, 6 and 8
Submit a complete list showing all key firms in the Proposer's team.	14	1.5 Ownership Structure and Project Team	1-14
Identify and describe potential subcontractors with demonstrated proof of the technical capabilities necessary to perform their proposed scope of work and or services.	15	1.5 Ownership Structure & Project Team	1-14
Submit evidence that the Proposer is duly and properly organized and is qualified to conduct business in Puerto Rico or will be prior to contract award.	15	Exhibit 39 Certificate of Formation Exhibit 40 Certificate of Good Standing	Exhibit 39 Exhibit 40
Respondents that demonstrate they have the staff available to begin immediately will be	15	1.5 Ownership Structure & Project Team	1-14

RFP Description	RFP Page Number	Proposal Section Number and Title	Proposal Page Number
scored higher than those who need more time,	Number	1.5.1 NFE Project	1-16
or whose responses are vague		Management Team	
Approach and Methodology Criteria:			
Explain your approach to completing the Project within the given construction dates and site constraints.	15	2.1.1 Overview of Approach & Schedule; Figure 4 CPM Schedule2.1.3 Proposed Project	2-2 2-5
		Location and Siting	
Include a summary-level CPM schedule detailing all aspects of the Project.	15	Figure 4 CPM Schedule	2-2
Include a detailed assessment and response to the site condition restraints.	15	2.1.3 Proposed Project Location and Siting	2-5
Respondents shall outline a clear and straightforward approach and demonstrated commitment to accomplishing the schedule goal of providing fuel gas for San Juan 5 and 6 no later than March, 2019.	15	2.1.1 Overview of Approach & Schedule; Figure 4 CPM Schedule	2-2
Respondents shall identify key goals and objectives, and methods for achieving high standards for the delivery of services, in expectation of meeting or exceeding these goals.	15	2.4 Project Execution Plan	2-20
Demonstrating a clear and thorough interpretation and acknowledged assimilation of the project work scope as described herein and that are part of this RFP.	15	2.1 Project Scope of Work and Description	2-1
Satisfactorily demonstrating how the duties will be staged to minimize impacts to PREPA operations.	15	2.4.7 San Juan Power Plant Execution Plan	2-5
Presenting a clear and logical approach for the efficient performance of all work tasks across the Proposer's entire Project Team	15	1.5.2 NFE Project Management Team	1-17
Describing how the Proposer's submitted milestone schedule demonstrates a clear understanding and integration of all the interrelated duties	15	2.1.1 Overview of Approach & Schedule; Figure 4 CPM Schedule	2-2
Describing how the Proposer intends to address and mitigate adverse environmental materials.	15	2.5.1 Environmental	2-13
Providing a specific and project-proven approach and plan for effective Quality Assurance/Quality Control across the Proposer's Project Team	16	2.5.2 Safety and Quality Assurance	2-14
The Proposer's outline plan and commitment to safety.	16	2.5.2 Safety and Quality Assurance Exhibit 28 NFE's Health, Safety, Security and Environmental Manual	2-14 Exhibit 28
Respondents shall explain how they will be organized to effectively deploy support for PREPA and clearly identify engagement manager and different work stream leaders.	16	1.5.2 NFE Project Management Team	1-17

RFP Description	RFP Page Number	Proposal Section Number and Title	Proposal Page Number
Price Proposal Criteria:	16		
Respondents shall clearly identify proposed capacity payment to cover costs for conversion of San Juan 5 and 6, proposed delivered fuel payment price, and proposed fuel price indices for inflation and changing market conditions.	16	3.0 Price Proposal	3-1
Terms and conditions of price proposal will also be a consideration.	16	3.0 Price Proposal Exhibit 32 NFE Draft of Terms and Conditions	3-1 Exhibit 32
Provide evidence of the Proposer's financial ability and resources to adequately perform and manage the Contract, manage risk or ability to obtain such resources as are required during the performance of the Project	16	5.2 Financial Ability and related Exhibits	5-1
If Proposer is a joint venture or a newly-formed entity, identify appropriate guarantor(s) and provide evidence of the financial resources of such guarantor(s).	16	5.2 Financial Ability and related Exhibits	5-1
Submit audited financial statements for the Proposer for the most recent three (3) fiscal years, certified by certified public accountant in accordance with generally accepted accounting principles	16	5.2 Financial Ability and related Exhibits	5-1
If applicable, provide all such information with respect to any guarantor(s).	16	5.2 Financial Ability and related Exhibits	5-1
Provide a letter from a bonding company satisfactory to PREPA that commits the bonding company to provide the required bonding on behalf of the Proposer if the Proposer is awarded the contract for the Project	16	Exhibit 46 Bonding and Surety Letter	Exhibit 46
Provide a letter from an insurance company, satisfactory to PREPA that commits the insurance company to provide the required insurance on behalf of the Proposer if the Proposer is awarded the contract for the Project.	16	Exhibit 47 Insurance Letter	Exhibit 47
Additional RFP Requirements:			
Proponents that are corporations, partnerships, or any other legal entity, U.S. or Puerto Rico based, shall be properly registered or capable to be registered or capable and willing to registered to do business in Puerto Rico and the U.S. at the time of the submission of their proposals, and comply with all applicable Puerto Rico or U.S. laws and/or requirements.	17	Exhibits 39 and 40 Certificate of Formation and Good Standing in Puerto Rico Exhibit 38 Merchant's Registry Certificate 4.5.2 Commitment to Compliance with Applicable Law	Exhibit 39 Exhibit 40 Exhibit 38 4-6
Proponent has adequate financial resources to perform the contract, or the ability to obtain them; financial statements for the past 2 years will be required or equivalent financial records must be included in the proposal.	17	5.2 Financial Ability and related Exhibits	5-1

RFP Description	RFP Page Number	Proposal Section Number and Title	Proposal Page Number
Proponent is able to comply with an accelerated delivery or performance schedule.	17	2.1.1 Overview of Approach & Schedule; Figure 4 CPM Schedule	2-2
Proponent has experience with similar projects and a satisfactory performance record.	17	1.2.1 Similar Engagements and Experience	1-2
Proponent has a satisfactory record of integrity and business ethics.	17	 4.5 Additional Legal Explanations and Documents Exhibit 41 Certification of compliance with Ethics Act of the Government of Puerto Rico 	Exhibit 41
Proponent has the necessary organization, experience, accounting and operational controls, and technical skills.	17	1.2.1 SimilarEngagements andExperience2.4 Project Execution Plan	1-2 2-20
Neither Proponent nor any person or entity associated who is partnering with Proponents has been the subject of any adverse findings that would prevent PREPA or Authority from selecting Proponent, including list on page 17 to 18 of RFP	17-18	4.5.2 Commitment to Compliance with Applicable Law	4-6
Provide a cover letter that includes a certification that the information submitted and the Proposal is true and accurate, and that the person signing the cover letter is authorized to submit the Proposal on behalf of the Proponents.	18	Transmittal Letter	Transmittal Letter
Clearly identify the designated contact person for the engagement.	18	1.5.1 NFE Leadership Team and Primary Contact	1-15
Provide a table of contents that clearly identifies the location of all material within the Proposal by section and page number.	18	Table of Contents This RFP Chart	
Provide a summary of the types of services the Proponent offers that relates to this RFP.	18	I-I About NFE	1-1
Identify engagement and or staff experience with entities comparable to PREPA for which the Proponents provides or has provided, similar services within the last (10) years.	18	1.2.1 Similar Engagements and Experience	1-2
Proponents must indicate the dollar value of the similar services to the ones contemplated in their RFP.	18	1.2.1 Similar Engagements and Experience	1-2
Detail at least one to three (1-3) similar engagements and/or experience with private and public-sector clients that would demonstrate that the Proponent can provide the requested services, including client name,	18-19	1.2.1 Similar Engagements and Experience	1-2

RFP Description	RFP Page Number	Proposal Section Number and Title	Proposal Page Number
description of engagement, beginning and	Number		Number
ending dates, examples of recommendation offered to the client relating to the project and			
the results of those recommendations, a			
demonstration of success based on those			
recommendations (such as performance			
metrics and improvements), description of how			
private sector example could be applied to			
public sector, key infrastructure programs			
advanced as a result of the project, and letters			
of recommendation.			
Please provide at least three (3) references for			
the prime Proponent and two (2) for any		1.4 Client References and	
partners or subcontractors, including the name,	19	Letters of	1-11
title, company, address, phone number and		Recommendation	
email address of the reference.			
		1.2.1 Similar	
Summary of Proponent's technical expertise		Engagements and	1-2
that describes the Proponent's unique capabilities, highlighting ability to provide fuel	19	Experience	1-2
gas shipping and delivery and program	19	_	2-1
management services.		2.1 Project Scope of Work	2-1
		Description	
Biographical summaries for Key Individuals and	19	1.5 Ownership Structure	1-12
their proposed roles.	17	& Project Team	1 12
Identify any sub-consultants and Local Parties			
incorporated into the team and clearly explain	19	1.5.5 Local Partners	1-19
their expertise, expected role and value to the			
engagement.			
Specify the primary contact person for the	10	1.5.1 NFE Leadership	
Proponent (name, title, location, telephone	19	Team and Primary	1-15
number and email address)		Contact	
Proposals must provide examples of how the		1.2.1 Similar	
proposed approach has achieved success in		Engagements and	1 0
specific, relevant projects for public or private	10	Experience	1-2
sector organizations similar in size and	19	-	2-1
complexity to PREPA with enough information to ascertain the success of the projects		2.1 Project Scope of Work	2-1
accomplished by the Proponent.		Description	
Acknowledgement that if selected the			
Proponent has the ability to respond with		1.5 Ownership Structure	
sufficient key and line staff and the proposed	19	& Project Team	1-12
Key Individuals			
Identify existing staff that will be involved in the			
services describe herein, including each staff		15 Originality States	
member's proposed role in the organization,	20	1.5 Ownership Structure	1-12
their relevant qualifications, and the allocation		& Project Team	
of their time to this engagement.			
Clearly identify the members of the team that			
are expected to be residing in Puerto Rico and	20	1.5 Ownership Structure	1-12
will serve as local contacts for the engagement	20	& Project Team	1-12
purposes.			

RFP Description	RFP Page Number	Proposal Section Number and Title	Proposal Page Number
Proponents are required to submit their price			
proposal in accordance to the Price Proposal	20	3.0 Price Proposal	3-1
Form (Attachment 1).			0 1
PREPA is interested in the four components of			
pricing outlined on page 20 of the RFP	20	3.0 Price Proposal	3-1
Proponents shall explain their adherence to			
complying with all applicable Federal and			
Puerto Rico permits and regulations. Indicate			
what characteristics of the team set them apart		4.5.2 Commitment to	
in terms of commitment to comply with all	20	Compliance with	4-6
applicable laws and requirements. Indicate		Applicable Law	
what specific trainings and expertise reside			
within the team that reinforces the commitment			
to compliance.			
Explain how the Local Party(ies) will add value			
to the team and their expected role.	20	1.5.5 Local Partners	1-19
Identify the Key Personnel from the Local			
Party(ies) and provide an indication of the			
expected level of involvement on the day-to-day	20	1.5.5 Local Partners	1-19
activities and interaction with PREPA.			
All Proponents are required to submit a	21		
redacted copy of their proposal.	21	See redacted copy	
Proponents are required to provide a list of any			
other current or former advisory contracts the		4.5.4 Additional Legal	
firm has/had with any Government Entity in		Explanations and	
Puerto Rico, or which bear any direct or indirect	21	Documents	4-8
relation to the activities of the Government of			
Puerto Rico		NFE has none.	
Provide a description of any recent historical or			
ongoing legal proceedings, interviews or		4.5 Additional Legal	
investigations being conducted by any U.S. law		Explanations /	
enforcement agencies involving your firm or	21	Documents	4-7
team that are related to transactions executed	21	Documents	1,
in or on behalf of the Government of Puerto		NFE has none.	
and/or its public corporations.			
Provide a brief description of any work you		4.5.5 Additional Legal	
have performed for any creditors or guarantors		Explanations /	
of the Government of Puerto Rico or any public	21	Documents	4-8
corporation debt about their positions in Puerto		2000000	10
Rico debt obligations		NFE has none.	
Certification that Contractor has filed all the	23		
necessary and required income tax returns to	25		
the Government of Puerto Rico for the last five		Exhibit 35 Income Tax	
years and that it has complied and is current		Certification from MRCC	Exhibit 35
with the payment of all income taxes due to the			
Government of Puerto Rico.			
Contractor will certify and warrant that it has	24	Exhibit 43 Certification	
made all payments required for unemployment		that NFE has made all	
benefits, workmen's compensation and social		payments required for	Exhibit 43
security for chauffeurs, whichever is applicable,		unemployment,	Limble 10
or that in lieu thereof, has subscribed a payment		workmen's compensation,	
or that in neu thereof, has subscribed a payment	l		

RFP Description	RFP Page Number	Proposal Section Number and Title	Proposal Page Number
plan in connection with any such unpaid items and is in full compliance with the terms thereof. The Contractor accepts and acknowledges its responsibility for requiring and obtaining a similar warranty and certification from each and every Contractor and Sub Contractor whose service the Contractor has secured in connection with the services to be rendered under this Contract and shall forward evidence to PREPA as to its compliance with this requirement.		and social security for chauffeurs.	
The Contractor will certify and guarantee that it does not have any current debt with regards to property taxes that may be registered with the Government of Puerto Rico's Municipal Tax Collection Center (known in Spanish as Centro de Recaudación de Ingresos Municipales ("CRIM").	24	Exhibit 36 Property Tax Certificate from CRIM	Exhibit 36
The Contractor shall provide, to the satisfaction of PREPA and whenever requested by PREPA during the term of this Contract, Certification issued by the Municipal Revenues Collection Center (MRCC), assuring that Contractor does not owe any tax accruing to such governmental agency.	24	Exhibit 35 Income Tax Certification from MRCC	Exhibit 35
Contractor shall provide a sworn statement executed by Contractor indicating that (i) its revenues are derived from the rendering of professional services, (ii) during the last five (5) years (or the time in which it has been providing professional services) it has had no taxable business or personal property on the 1st of January of each year, (iii) that for such reasons it has not been required to file personal property tax returns, as required under Article 6.03 of Act 83-1991, as amended and (iv) that for such reason it does not have an electronic tax file in the MRCC's electronic system	24	Not applicable	
Certification issued by the Treasury Department of Puerto Rico which indicates that Contractor does not owe Puerto Rico Sales and Use taxes, or is paying such taxes by an installment plan and is in full compliance with its terms.	25	Exhibit 37 Sales and Use Tax Certification from Treasury Department	Exhibit 37
Puerto Rico Sales and Use Tax Filing Certificate, issued by the Treasury Department of Puerto Rico assuring that Contractor has filed its Puerto Rico Sales and Use Tax for the last sixty contributory periods.	25	Exhibit 37 Sales and Use Tax Certification from Treasury Department	Exhibit 37

RFP Description	RFP Page Number	Proposal Section Number and Title	Proposal Page Number
Copy of the Certificate of Merchant's Registration issued by the Treasury Department of Puerto Rico.	25	Exhibit 38 Merchant's Registry Certificate	Exhibit 38
Documentation certifying that the Contractor nor any of its owners, affiliates or subsidiaries, if applicable, have any debt, outstanding debt, or Legal procedures to collect child support payments registered with the Puerto Rico Child Support Administration.	25	Exhibit 43 Certification that NFE, nor any of its owners, affiliates or subsidiaries have any debt or legal procedures to collect child support payments registered with the Puerto Rico Child Support Administration.	Exhibit 43
Good Standing Certificate issued by the Department of State of Puerto Rico.	25	Exhibit 40 Certificate of Good Standing	Exhibit 40
Certificate of Incorporation or Certificate of Authorization to do business in Puerto Rico issued by the Department of State of Puerto Rico.	25	Exhibit 39 Certificate of Formation	Exhibit 39
Certification of compliance with the Ethics Act of the Government of Puerto Rico, which stipulates that no employee or executive of PREPA nor any member of his/her immediate family shall have any direct or indirect pecuniary interest in the services to be rendered under the Contract, except as expressly authorized by the Governor of Puerto Rico in consultation with the Secretary of Treasury and the Secretary of Justice of the Government.	25-26	Exhibit 41 Certification of compliance with Ethics Act	Exhibit 41
Certification that if there is any Judicial or Administrative Order demanding payment or any economic support regarding Act No. 168- 2000 (Law for the Strengthening of the Family Support and Livelihood of Elderly People), the same is current and in all aspects in compliance.	26	Exhibit 43 Certification of compliance with judicial orders	Exhibit 43
Contractor agrees to comply with the provisions of Act No. 2-2018, as the same may be amended from time to time, which establishes the Anti-Corruption Code for a New Puerto Rico. The Contractor hereby certifies that it does not represent particular interests in cases or matters that imply a conflicts of interest, or of public policy, between the executive agency and the particular interests it represents.	27	Exhibit 44 Non Conflict of Interest	Exhibit 44
Sworn statement that neither Contractor nor any president, vice president, executive director or any member of a board of officials or board of directors, or any person performing equivalent functions for Contractor has been convicted of or has pled guilty to any of the	27	Exhibit 43 Certificate in compliance with the sworn statement.	Exhibit 43

RFP Description	RFP Page Number	Proposal Section Number and Title	Proposal Page Number
crimes listed in the Act for the Administration			
and Transformation of Human Resources in the			
Government of Puerto Rico or any of the crimes			
included in Act 2-2018.			

TRANSMITTAL LETTER



September 25, 2018

Puerto Rico Electric Power Authority Supplier Registry Office P.O. Box 3670151 San Juan, Puerto Rico 00936

Re: RFP 81412: Request for Proposals for Fuel Supply in the North and Conversion of San Juan Units 5 and 6, issued by the Puerto Rico Electric Power Authority

Dear Delis Zambrana and Natalia Martínez Lugo:

NFEnergía LLC (together with its affiliates, "<u>New Fortress Energy</u>" or "<u>NFE</u>") is pleased to provide this proposal for providing LNG fuel supply in the North and fuel conversion of San Juan Units 5 & 6 to natural gas.

We hereby certify that the information submitted in this proposal is true and accurate and that Christopher S. Guinta is authorized to sign and submit this proposal on behalf of NFE.

Our full response to the RFP issued by PREPA is attached to this letter. This letter and all attachments contain confidential and proprietary business information and intellectual property of NFE. This letter and each attachment shall be treated as confidential by PREPA. We have also submitted a version of our proposal with all confidential and proprietary information redacted. Thank you for the opportunity to allow us to submit our proposal for your consideration. We look forward to discussing in greater detail and we stand ready to answer any questions that you may have.

Best Regards,

Christopher S. Guinta on behalf of NFEnergía LLC

EXECUTIVE SUMMARY



LNG Fuel Supply and Fuel Conversion Project

PUERTO RICO ELECTRIC POWER AUTHORITY



Puerto Rico has an opportunity to transform its energy sector, catalyzed by the proposed conversion of San Juan Units 5 & 6 to run on natural gas. Puerto Rico's existing generation fleet is largely dependent on petroleum-based fuel, leading to high and volatile costs of generation and violations of US ambient air standards. The average cost of electricity in Puerto Rico across all sectors (residential, commercial, and industrial) has been 22.10 cents per Kwh in the first half of 2018, double the U.S. average, according to the Energy Information Administration. With a continued severe weather threat posed to the transmission grid, there is a need for more affordable and reliable power generation in the North—closer to the population center of San Juan. As the Government of Puerto Rico and the Puerto Rico Electric Power Authority (PREPA) have acknowledged, achieving cleaner, more cost-effective and efficient electricity generation, through natural gas utilization, is vital for Puerto Rico's recovery and sustainable development.

OPTIMIZED APPROACH

Given those objectives and the urgency of the situation, NFEnergía LLC (together with its affiliates, "New Fortress Energy" or "NFE") is pleased to present a turnkey proposal for the conversion of San Juan Units 5 & 6 to natural gas and all necessary LNG infrastructure and fuel supply. Our proposal is configured to minimize the cost of PREPA's annual capacity payment and natural gas price, made possible through the optimization of NFE's infrastructure assets in the region, including a micro-fuel handling (MFH) facility located adjacent to the plant that is under development in the Port of San Juan—designated as a Strategic Project under Article 84 of Act 19-2017. We believe our offer will allow PREPA to save \$1.3 billion on a net present value basis over the 5-year base period of the initial



contract. Importantly, NFE's proposal is not contingent on third-party financing and will not require upfront capital investment from PREPA.

FULLY INTEGRATED GAS TO POWER SOLUTION

PREPA is expected to spend over \$450 million annually on diesel fuel to produce ~400MW of power at San Juan Units 5 & 6. Under NFE's proposed solution using LNG for power generation, PREPA will save approximately \$24 million each month in system costs, or over \$285 million annually, and will produce 440MW (40MW in excess of what is available today running on diesel). Put simply: the sooner the plant is converted to run on natural gas, the sooner PREPA can begin to save and produce more efficient power. With that in mind, the solution we've outlined in this proposal will guarantee the shortest possible timeline for conversion and installation of fuel supply infrastructure, thanks to significant groundwork by NFE and our world-class partners, including Mitsubishi Hitachi Power Systems, Black & Veatch, Moffat & Nichol, Tetratech, and Anthony Veder. NFE has secured land directly adjacent to the San Juan Power Plant via a long-term lease agreement with the Puerto Rico Ports Authority, which has approved the development of a micro-fuel handling facility at the site. NFE has worked closely with both federal and local regulators to ensure compliance and on-time delivery of the facility.

NFE's facility has received an approved Environmental Assessment and Jones Act letter, filed the necessary endorsements and completed all submissions required under the Coast Guard Letter of Recommendation process. The facility has completed the demolition processes for warehouses previously on the site and is now preparing for civil and structural sitework. The long lead items required to expand the facility to align with the San Juan Power Plant can advance immediately upon notice to proceed. NFE has already begun detailed engineering and design on the PREPA power plant conversion using information supplied by Mitsubishi, PREPA's preferred supplier. In preparation for this submission, NFE has selected its supporting contractors to ensure integration for all parties for engineering and design, procurement, construction, and permitting to meet the project schedule.

As part of our preparation for this submission, NFE evaluated a series of solutions and fuels for San Juan 5 & 6. First, NFE analyzed San Juan Power Station's current diesel operations, which are costly, volatile, and contributes to noncompliance risk under US EPA rules. Operating on diesel leads to a higher heat rate and O&M costs than when running on natural gas. Furthermore, the available generation capacity is significantly lower than when running on natural gas, causing PREPA to dispatch inefficient peaking units. Therefore, diesel is not the most efficient primary fuel for San Juan 5 & 6 operations, but still has value as a back-up fuel in the case where the primary fuel is not available.



Second, NFE analyzed LPG as an alternative fuel. NFE is not aware of any OEM in the world (e.g., Mitsubishi, GE, Siemens, etc.) that has a base load plant operating on LPG today. LPG as a fuel choice would create a series of technical issues related to the safety and reliability of the units as well as continue to link the fuel price to movements in the oil markets. From a performance perspective, if the units run on LPG, similar to diesel, both the heat rate and the O&M costs are significantly higher and the available capacity is significantly lower than when running on natural gas. As requested in the RFP, we asked Mitsubishi Hitachi Power Systems about the safety and reliability of LPG and they reported that a conversion to LPG would introduce safety concerns and have a lower generation capacity and higher heat rate compared to a conversion to natural gas. Therefore, LPG seemed to be at odds with the goals of the RFP, including, among other things, an affordable, actionable, and safe solution delivered in 2019. As a result of our due diligence, we agree with PREPA's decision to use natural gas as the baseload fuel for San Juan Units 5 & 6 and believe that our proposal will be the superior choice for PREPA.

UNPARALLELED EXPERIENCE

NFE has proven experience developing similar projects in the Caribbean, as a major partner to the Jamaica Public Service Company, JAMALCO, Heineken International, and Barbados National Oil Company, among others. NFE supplies natural gas to fuel approximately 70% of Jamaica's average daily demand, including power plants converted from diesel to natural gas. We've seen firsthand the positive impact of a reliable supply of LNG on an island economy and are confident that the introduction of natural gas to the North will similarly spur more modern gas-fired generation and renewable

integration. We look forward to a successful partnership in Puerto Rico that will generate savings, improve efficiency, bolster resiliency, and reduce environmental impact. We believe we are best positioned to deliver all of these benefits, and do so on the shortest timeline possible. We very much look forward to working with you and your team on this project.

The diversification and security of Jamaica's energy sector is much stronger as a result of the partnership with NFE.

– Kelly Tomblin, INTREN

CFEn and CFEi are working close with NFE and we are sure that the solution developed will result in more clean, affordable and reliable energy for the benefit of the people of Mexico. I am proud to recommend NFE for other energy projects across the world.

Guillermo Turrent Schnaas,
 CEO of CFEnergia and CFE
 International

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LIST OF EXHIBITS

- 1. New Fortress Energy Letters of Recommendation
 - a. Vincent M. Lawrence, Former Chairman of the Electricity Sector Enterprise Team in Jamaica
 - b. Guillermo Turrent, CEO of CFEnergía & CFE International in Mexico
 - c. Kelly Tomblin, Chief Executive Officer of INTREN
 - d. James Browne, General Manager of Barbados National Oil Company Limited
- 2. Black & Veatch Letters of Recommendation
 - a. Energía Costa Azul LNG Regasification Project
 - b. Port Westward Project
 - c. Enmax Shepard Energy Centre Project
 - d. Puerto Rico Aqueduct and Sewer Authority (PRASA)
- 3. Moffatt & Nichol Letters of Recommendation
 - a. City of Ketchikan, Port & Harbor
 - b. Disney Cruise Lines
- 4. New Fortress Energy Key Personnel Bios
- 5. Black & Veatch Qualifications
- 6. Black & Veatch Key Personnel Bios
- 7. Moffatt & Nichol Qualifications
- 8. Moffat & Nichol Key Personnel Bios
- 9. TSK Qualifications
- 10. Professional NDT Services Qualifications
- 11. Anthony Veder Qualifications
- 12. Aireko Companies Qualifications
- 13. CIC Construction Group Qualifications / Key Personnel Bios
- 14. Del Valle Group Qualifications
- 15. Lord Electric Co. of P.R., Inc. Qualifications
- 16. Lord Construction Qualifications / Key Personnel Bios

- 17. L.P.C. & D., Inc. Qualifications
- 18. PREPA Supply Registry Confirmation
- 19. MFH Division of Responsibility
- 20. Power Plant Division of Responsibility
- 21. MFH Process Flow Diagram
- 22. Power Plant P&IDs (P199399-CTGP-M2626 / P199399-CFGA-M2381)
- 23. Basic Engineering Design Data
- 24. Marine, Civil, and Electrical Design
- 25. Mitsubishi Schedule
- 26. Mitsubishi Letter Confirming Subcontracting for Natural Gas Conversion and Responding to Inquiries Regarding LPG Conversion
- 27. Ship to Ship Manual
- 28. Quality Assurance Plans
 - a. Black & Veatch Quality Plan
 - b. Moffatt & Nichol Quality Plan
 - c. TSK Quality Plan
- 29. Health, Safety, Security and Environmental Manual
- 30. Gas Supply Confirmation Exhibits
 - a. Centrica Letter confirming Gas Supply
 - b. Centrica Corporate Snapshot
- 31. Ship Confirmation
 - a. Letter from Anthony Veder confirming arrangements for ships
 - b. Evidence of Charter Agreement for Golar Freeze
 - c. Evidence of Charter Agreement for Golar Arctic
- 32. Markup of Terms and Conditions
- 33. Evidence of Jones Act Compliance
- 34. Puerto Rico Ports Authority Letter of Support

- 35. Income Tax Certification from MRCC
- 36. Property Tax Certification from CRIM
- 37. Sales and Use Tax Certification from the Treasury Department
- 38. Merchant's Registry Certificate
- 39. Certificate of Formation
- 40. Certificate of Good Standing
- 41. Certification of compliance with Ethics Act of the Government of Puerto Rico, on PREPA's form.
- 42. Certification to comply with Act No. 2-2018 which established the Anti-Corruption Code for a New Puerto Rico on PREPA's form.
- 43. Sworn statements
 - a. Prohibition Against Awarding Bid or Contract to Juridical Person Convicted of Felonies or Misdemeanors
 - b. Puerto Rico Child Support Administration
 - c. Compliance with the Department of Labor of the Commonwealth of Puerto Rico
 - d. Law for the Strengthening of the Family Support and Livelihood of Elderly People
- 44. Non-Conflict of Interest
- 45. Department of Energy Natural Gas Import Approval
- 46. Audited Financial Statements
 - a. NFEnergía LLC
 - b. New Fortress Energy Holdings LLC Balance Sheet
 - c. Fortress Investment Group LLC
- 47. Bonding and Surety Letter
- 48. Insurance Letter



SECTION 1.0

NFE Experience & Capacity


1.0 NFE Experience & Capacity

1.1 ABOUT NFE

NFEnergía LLC, together with its affiliates (NFE), has developed, constructed and commissioned numerous critical energy infrastructure assets in the U.S. and the Caribbean. Together with our affiliate Fortress Investment Group LLC, NFE has invested over \$25 billion in the infrastructure, transportation and energy sectors since 2001.

As a global energy infrastructure leader, NFE is accelerating the transition to LNG for power, transportation, marine and industrial users worldwide. NFE has the experience and expertise to play a meaningful role in the advancement of LNG as a clean, safe and environmentally friendly fuel source for Puerto Rico.

NFE provides a variety of services that are directly related to this RFP – NFE self-finances, builds and operates much needed gas-to-power infrastructure bringing each customer a tailored energy solution, including: liquefiers, onshore and offshore regasification facilities, and power plants. NFE has a secure portfolio supply of fuel, including from our liquefaction facilities, offtake from the world's largest suppliers, and ability to procure fuel as needed from the global market.

NFE provides customized technical solutions and logistics to deliver natural gas and meet each customer's energy needs. NFE's expertise includes the supply of fuel to converted power plants, including the logistics and infrastructure necessary for large scale utility customers, such as PREPA. Additionally, NFE is a leader in the design of intermodal networks, transporting LNG by tankers and in ISO-containers over the road, on rail, and aboard commercial ocean going carriers. NFE also leads the industry in the innovative use of LNG ship-to-ship (STS) transfers, leveraging its expertise in every step of the LNG supply chain to provide bulk LNG solutions to size constrained areas previously inaccessible to large-scale bulk carriers.

1.2 QUALIFICATIONS AND EXPERIENCE

NFE has demonstrated its experience and expertise in developing LNG to power projects of similar scope to that which is described in this proposal, particularly excelling in the unique capabilities required for servicing this natural gas conversion project. NFE is one of the few firms in the world that has developed an onshore LNG terminal, a floating storage hub for LNG, an offshore terminal utilizing a FSRU, an operating LNG liquefaction facility and all the associated logistics to deliver and utilize the natural gas. In the Atlantic region, we own and operate the only terminal that transloads small-scale LNG carriers today. Our terminal is integrated with a combined-cycle natural gas plant that was converted from diesel to natural gas. This facility, including the conversion work and the logistics to deliver a reliable supply of natural gas, is of a similar scope as the duties required by the terms of this RFP. We are not aware of any firm, other than NFE, currently operating in the North that has demonstrated experience and success in developing LNG fuel developments of similar scope as the duties described in the RFP. In addition to NFE's experience, we have world-class partners, such as Mitsubishi Hitachi Power Systems, Black & Veatch and Moffat & Nichol engaged to execute this project. Black & Veatch executed Ecoelectrica's Penuélas project successfully and it has been in operation reliably since 2001.

1.2.1 Similar Engagements & Experience

Project One: New Fortress Energy Montego Bay LNG Micro-Fuel Handling Facility

a) Name of client organization: Jamaica Public Service Company

b) Description of engagement or experience and objectives of the project including beginning and ending dates:

In August 2015, NFE won a competitive tender process to supply the 120MW Bogue combined-cycle power plant in Jamaica with natural gas. The plant was built in 2003 but had operated on diesel fuel due to an inability to obtain natural gas over the preceding years. The Bogue plant was converted to run on natural gas as part of the project, with NFE providing a turnkey solution to build, own and operate an LNG storage and regasification facility, pipeline and all of the associated logistics to supply natural gas to the power station on a daily basis. The terminal was commissioned in October 2016 (14 months after contract signing), and has been available 99.88% year to date with a total recordable injury rate of 0.0 over the same period.

NFE currently sources LNG from the global market as well as its own facility. The LNG procured for Jamaica is then stored in a floating storage vessel, which is anchored in Portland Bight, a sheltered harbor, on Jamaica's South Coast (see Project Two for a more detailed description). NFE then performs a ship-to-ship transfer, transferring LNG via flexible, composite, cryogenic hoses from the large vessel into a small-LNGC. The small-LNGC then sails to the Port of Montego Bay, and unloads from the ship into NFE's storage tanks via a cryogenic transfer system, comprised of composite, cryogenic hoses, fitted with dry break emergency release couplings. The ship-to-shore transfer system replicates all aspects of the LNG carrier unloading at a conventional LNG terminal except composite hoses are used in place of articulated hard arms. The transfer system includes state-of-the-art ship-shore communications and emergency shutdown systems as used in large conventional terminals.

c) Examples of recommendations offered to the client and the results of the implementation of those recommendations:

The success of the project has enabled Jamaica Public Service to expand the Bogue power plant to 145MW from the original 120MW capacity with no incremental capital required to be invested in the terminal by Jamaica Public Service to support the expanded send-out capability. The switch from diesel fuel to natural gas is currently saving the Jamaican energy consumer over \$150,000 per day or \$55 million annually based upon current fuel prices.

d) Information regarding the project that would demonstrate successful experiences by the client, as a result of the recommendations. This may include performance metrics and improvements.

Savings of over \$150,000 per day or \$55 million annually

e) If the example involves a private sector client, describe how the experience could be applied to the public sector.

Jamaica Public Service Company is a public-sector client.

f) Description of key infrastructure programs or projects advanced as part of the engagement, if any.

The terminal has since served as a catalyst for the development of the natural gas economy in Jamaica, as industrial users from breweries (Red Stripe) to food producers (Wisynco) have begun utilizing natural gas for their production needs. Since inception, our terminal has handled over 100 ship-to-ship transfers and filled tanker trucks without safety or environmental incident, the most in the Caribbean region. Furthermore, there have been no missed cargo deliveries by NFE to its customers, allowing for 100% availability of LNG.

Dollar value: \$250 million+

The project to convert San Juan Units 5 & 6 has a number of direct similarities to NFE's operating Montego Bay micro-fuel handling facility and logistics chain:

- NFE's terminal receives LNG via LNG ships that are similar in size to LNG ships proposed for San Juan.
- NFE's terminal is co-located with and shares a berth with cruise ships, bulk liquid fuel carriers, and container ship operations.
- NFE's terminal is integrated with a combined-cycle natural gas plant that was converted from diesel fuel only to be capable of running on natural gas (and diesel fuel as backup). PREPA has the option of adding inlet air cooling to the conversion of the San Juan Power Plant.



Figure 1-1: Ship-to-Shore Transfer at NFE's Montego Bay Micro-Fuel Handling Facility

g) Letters of recommendation: Please refer to Exhibit 1

Project Two: New Fortress Energy Floating Storage, Regasification and Transshipment Hub

a) Name of client organization: South Jamaica Power Company, a subsidiary of Jamaica Public Service Company

b) Description of engagement or experience and objectives of the project including beginning and ending dates:

In October 2016, NFE won a competitive tender process to supply natural gas to a new 190MW combined-cycle natural gas plant to be built in Old Harbour Bay, Jamaica. In September 2018, NFE completed its world-scale offshore terminal designed to supply natural gas through up to four sub-sea natural gas pipelines connecting the terminal to end users. The floating storage hub will be stationed at a fixed offshore terminal location in Old Harbour, Jamaica where it will supply natural gas to power plants and alumina/bauxite refineries on the island, along with continuing to load other ships for transshipment of LNG throughout Jamaica and the Caribbean. The hub will provide natural gas for:

- The first newly built power plant in Jamaica in 20 years. This plant will supply 30-40% of Jamaica's electricity needs.
- The first natural gas-fired co-generation plant in the Caribbean. This plant will make Jamaica's Jamalco Refinery competitive as a producer of alumina in the Atlantic Basin (see Project Three).

c) Examples of recommendations offered to the client and the results of the implementation of those recommendations:

NFE's recommendations for expanding the availability of natural gas in Jamaica demonstrates how our technical capacities can serve our customer's broader objectives. Originally, JPS envisioned a single purpose LNG facility, capable of just serving the 190MW via a 3-mile sub-sea cryogenic pipeline to fill a 5M gallon per day storage tank. Due to its singular purpose, the facility would have been costly, taken longer to build, been harder to permit and potentially would have posed higher risk for JPS. NFE proposed a solution that delivered significantly more storage (40M gallons vs. 5M gallons), was part of a larger supply network that spread the cost over multiple users, and allowed for a discount on fuel as additional volumes were consumed in Jamaica.

d) Information regarding the project that would demonstrate successfully experiences by the client, as a result of the recommendations. This may include performance metrics and improvements.

As a result of NFE's collaboration with JPS, JPS will receive a savings of \$100,000 per day, \$35MM per year. In total, the hub will have catalyzed approximately \$1 billion in investment in the Jamaican energy sector.

NFE worked with JPS to help them secure 15-year financing for the power plant, which was entirely sourced in the domestic markets. This represented the largest local market financing in Jamaican history.

NFE was the ideal partner for JPS due its:

- Capabilities in the LNG industry which allowed JPS to pursue a solution with greater economic and environmental benefit for the island at lower cost than the customer's original concept.
- Self-financing balance providing flexibility.
- Single-source supply chain and points of contact.
- Experience in the capital markets (our principals have traded and financed over \$1 trillion of securities and loans).

e) If the example involves a private sector client, describe how the experience could be applied to the public sector.

South Jamaica Power Company and Jamaica Public Service Company are public-sector clients.

f) Description of key infrastructure programs or projects advanced as part of the engagement, if any.

NFE's storage hub in Old Harbour Bay, Jamaica can hold up to 175,000m³ of floating storage and serves as the receiving point for large scale LNG deliveries. The storage unit then transfers LNG to NFE's fleet of smaller vessels which supply LNG to Montego Bay and will supply other islands in the Caribbean including Puerto Rico. The hub serves as the central receiving point for NFE's LNG supply in the region.

Dollar value: \$500 million+



Figure 1-2: New Fortress Energy World-Scale, Old Harbour LNG Terminal

g) Letters of recommendation: Please refer to Exhibit 1

Project Three: New Fortress Energy Jamalco Combined Heat and Power Plant

a) Name of client organization: Jamalco Bauxite and Alumina Refinery. Clarendon, Jamaica

b) Description of engagement or experience and objectives of the project including beginning and ending dates:

In September 2016, NFE received a mandate to develop a Combined Heat and Power Plant (CHP) at the Jamalco Bauxite and Alumina Refinery that would deliver a critical 100 MW of natural gas-fired power to the Jamaica Electricity grid and 300,000 pounds per hour of high pressure steam to the refinery. The steam would be used to replace an existing boiler that consumes approximately 500,000 barrels of heavy fuel oil per year, dramatically reducing Jamalco's energy costs, transforming its environmental footprint and improving the plant's cost position among alumina producers globally. During 2017, NFE completed a Power Purchase Agreement with the Jamaica Public Service Company, a Steam Sale Agreement with Jamalco and the necessary permit applications. As of September 2018, NFE has begun civil works, and the CHP is expected to be mechanically complete in 3Q 2019 and fully commissioned by 1Q 2020. The CHP will then operate under 20 year agreements with the ability to double in size as electricity demand grows in Jamaica.

c) Examples of recommendations offered to the client and the results of the implementation of those recommendations:

Jamalco had spent approximately 10 years searching for an energy alternative to heavy fuel oil, looking at both natural gas and even at coal to lower the refinery's energy costs, comply with environmental regulations and allow for expansion. These efforts failed due to unavailability of attractively priced natural gas on the island, large capital commitment requirements and high capital costs and long development time of coal-fired power plants. NFE was able to deliver a solution to Jamalco based on:

- Ability to leverage existing multi-purpose natural gas infrastructure being built by NFE in Old Harbour Bay, Jamaica
- NFE's ability to finance on balance sheet, providing the flexibility, speed and creativity necessary to deliver the project in an affordable and reasonable time frame
- NFE's ability to fix the price of steam, allowing Jamalco to secure attractively priced steam while removing price volatility

Additional benefits captured by Jamalco from NFE's implementation of the CHP include: 1) installation of a condensate treatment plant that will clean Jamalco's condensate reducing the refinery's power generation costs and improving plant reliability, 2) converting two of Jamalco's boilers to be duel-fuel fired, capable of operating on natural gas as well as heavy fuel oil and 3) installation of a waste water pipeline that will run parallel with NFE's gas pipeline to the CHP savings Jamalco millions of dollars in construction costs.

d) Information regarding the project that would demonstrate successful experiences by the client, as a result of the recommendations. This may include performance metrics and improvements.

As a result of NFE's project with Jamalco, Jamalco anticipates savings of over \$20mm per year at today's prices. In addition, the presence of gas has allowed Jamalco to:

- Undertake the conversion of its remaining boilers, calciners and lime kilns from heavy fuel oil to natural gas. These conversions will ultimately allow Jamalco to save a total of over \$50-60mm per annum in direct energy costs, enter into compliance on air emissions permits, and eliminate close to \$7-10mm in fuel maintenance and logistics costs.
- Potentially double the Jamalco plant's refining capacity in the future.

e) If the example involves a private sector client, describe how the experience could be applied to the public sector.

Jamalco is 55% owned by a private company, Noble Group and 45% owned by the Jamaican government. NFE's experience in handling negotiations, contracting and development at Jamalco has direct similarities to working with PREPA. They include:

- Noble Group is currently undergoing a restructuring process. As a result, all documentation and work had to satisfy both existing Noble management and the credit agreements being negotiated as part of the restructuring.
- The 45% stake owned by the Jamaica Government requires NFE to comply with all rules involving government organizations. In addition, NFE's deep understanding of government relations, public relations, and the demands on public officials allowed it to navigate the process in a timely and efficient manner

f) Description of key infrastructure programs or projects advanced as part of the engagement, if any.

As part of the project, NFE is building:

- A new 100 MW/900# steam natural gas-fired combined heat and power plant at Jamalco's refinery (CHP)
- A pipeline from the Rocky Point port to the Jamalco refinery for delivery of natural gas to the CHP and the refinery
- Interconnection to Jamalco's water, effluent, sewerage and stormwater systems
- A 138kV substation and electricity transmission line connecting to the Jamaican power grid

Dollar value: \$300 million+

The project to convert San Juan Units 5 & 6 has a number of direct similarities to Jamalco:

- NFE was able to deliver an affordable price for steam and electricity because it was utilizing multipurpose infrastructure that had been built to serve other clients and transship fuel through out the Caribbean. In San Juan, NFE is building a multi-fuel handling terminal that will receive fuel from the transshipment terminal and serve industrial users and potentially PREPA. As a result, no one client bears the entire cost of the infrastructure or logistics chain, allowing NFE to deliver an affordable price and results to all clients
- Engagement with an entity that features significant public ownership. NFE is acutely aware of the demands on public entities and the need to manage public relations in addition to just schedule and budget.
- NFE is using the same team that would perform work for PREPA: Black and Veatch as Owner's Engineer and TSK as contractor. NFE is working with the original equipment manufacturer to handle the boiler conversions, as it would work with Mitsubishi to convert San Juan Units 5 & 6.

NFE has had to balance a Noble restructuring process, government owned entity and a site that had been burning oil for years. This is similar to both the existing San Juan Power Plant and the broader ownership of it as PREPA restructures with its creditors.



Figure 1-3: Jamalco Combined Heat and Power Plant

g) Letters of recommendation: Please refer to Exhibit 1

Project Four: New Fortress Energy Miami LNG Plant

a) Name of client organization: Florida East Coast Railway (FEC).

b) Description of engagement or experience and objectives of the project including beginning and ending dates:

In 2014, NFE built the first privately owned LNG plant in Florida. The plant provides LNG to FEC, which is a Class II regional railroad that owns all of the 351-mile mainline track from Jacksonville, Florida down to Miami. FEC uses LNG to fuel its locomotives. In addition, FEC transports LNG on behalf of customers to various locations, including to the Port of Miami for export. In addition to FEC, the plant fuels customers looking to reduce their reliance on diesel, remove volatility from their operating costs, improve environmental footprint and utilize gas as a competitive advantage.

With rail and truck loading capabilities as well as direct rail access to major Florida ports, the plant is uniquely positioned to supply LNG to customers in South Florida and the Caribbean markets.

c) Examples of recommendations offered to the client and the results of the implementation of those recommendations:

The facility is served by both rail and truck to enhance operational flexibility. It is the only LNG facility in the lower 48 states of the United States with rail loading. In February 2016, the facility became the first LNG facility in the lower 48 states to export LNG to a non-FTA country, supplying critically needed LNG to Barbados to supplement its declining natural gas reserves. Since then, the facility has handled the turnkey loading and transshipment of over 1,000 railcars, ISO containers and LNG tankers. The plant's availability is world-class and it has never missed a delivery to a customer.

The plant was built with state-of-the-art equipment and advanced technology provided by world-class vendors, capable of remote troubleshooting so potential issues can be monitored and assessed from outside the plant.

d) Information regarding the project that would demonstrate successfully experiences by the client, as a result of the recommendations. This may include performance metrics and improvements.:

With a fully trained staff in place, the plant has zero reported lost time incidents to date. NFE's expertise includes the design of intermodal networks, transporting LNG by tankers and in International Standards Organization (ISO) containers over the road, on rail, and aboard commercial ocean carriers. Our location and loading versatility has enabled NFE to develop a small-scale logistics chain, supplying end-users with a more efficient and environmentally friendly fuel source. To date, we are delivering LNG to customers across the region with 100% reliability.

e) If the example involves a private sector client, describe how the experience could be applied to the public sector

NFE applies the same level of service and professionalism to all of its projects. FEC was able to take advantage of our recommendations to create the rail loading at our LNG facility and improve both its rail operations, allowing its trains to run on cleaner and cheaper fuel, and its business by delivering LNG to the Port of Miami.

f) Description of key infrastructure programs or projects advanced as part of the engagement, if any.

Rail loading at NFE's LNG facility, facilitating FEC's investment in LNG powered trains and a business delivering LNG to the Port of Miami.

Dollar value: \$100 million+

1.2.2 Operational Excellence

In addition to NFE's proven track record for project implementation, NFE has a reputation for operational excellence. NFE owns and operates LNG and natural gas facilities with reliability and safety records that show our continued diligence and focus in these areas.

At our micro fuel handling facility in Montego Bay, as described in Project One above, NFE has shown excellent results on a very similar project to the conversion and supply of San Juan Units 5 & 6:

- Facility availability year to date: 99.88%
- Ship to ship operations to date: 108
- Cargo transfers from ships to date: 114
- Truck loadings to date: 235
- Zero marine spills to date
- Zero marine safety incidents to date
- Zero personnel safety incidents year to date

At our Miami LNG facility, as described in Project Four, NFE also has excellent operational results. These results show our ability to continue to deliver on our operational excellence over a period of years:

- Facility availability year to date: 98.3%
- Rail, tanker and ISO loadings to date: over 1100
- Zero safety incidents since plant commissioning

1.3 VALUE PROPOSITION

The proposal put forth by NFE offers several compelling factors that distinguish our commercial and technical solutions as the best suited to meet PREPA's stated objectives.

- NFE's offer delivers over <u>~\$1.3 billion of savings</u> over the 5-year initial term compared to expected diesel-based operations for San Juan Units 5 & 6.
- NFE's price of natural gas is based on Henry Hub and frees PREPA from oil market volatility.
- NFE's offer assumes <u>No Take or Pay</u> for natural gas supply. <u>NFE does not require any capital from</u> <u>PREPA</u> and is able to make our offer without any financing contingencies.
- NFE would be interested in developing further projects for PREPA, and if multiple projects are awarded to NFE, NFE would provide an incentive structure in our pricing to generate further savings

for PREPA as more natural gas is consumed using our logistics chain. For example, if PREPA were to convert the power plant at Mayaguez or develop a new project in Yabucoa, with total project size similar to Units 5 & 6 (around 500MW), the volume discount for natural gas could lead to a reduced Unit Cost.

- NFE is able to meet the aggressive timeline put forth by PREPA, allowing energy savings to accumulate quickly and almost immediately. Every month of savings is worth \$24mm to PREPA, meaning that a 12 month longer solution is a lost opportunity to save over \$285mm.
- Our timeline is possible because of our micro fuel handling facility in San Juan. The MFH facility will deliver LNG to industrial customers in Puerto Rico on trucks and in ISO containers, and can be expanded to provide natural gas to San Juan Units 5 & 6. Furthermore, NFE controls land adjacent to the power plant via a long-term lease with Puerto Rico Ports Authority, has a clear permitting path to obtain necessary approvals, has the support of MHPS, and has engaged with contractors that will be integral in the execution of the conversion project.
- NFE's facility can be seamless integrated into the San Juan Units 5 & 6 operations. The result is that the cold energy from the LNG regasification can provide a **potential 25mw benefit to the turbines** should PREPA wish to **pursue inlet cooling**. NFE's partner Black & Veatch has installed integrated inlet cooling both around the world and on island in EcoElectrica.
- NFE's micro fuel handling facility in San Juan is expected to <u>create approximately 30-50 permanent</u> <u>employment positions</u> for operations, maintenance, administrative and commercial functions. For the supply of natural gas to San Juan Units 5 & 6 from the micro-fuel handling facility, we anticipate an <u>additional 15-20 jobs</u> will be created in operations alone. Additionally, the construction of MFH Facility, regasification facility, and conversion of San Juan Units 5 & 6 would create <u>125 temporary jobs</u>.
- NFE's conversion of Units 5 & 6 to natural gas would further PREPA's objectives to promote smart energy consumption and protect the environment. The conversion from diesel to Natural Gas would eliminate approximately <u>500,000 tons per annum of CO2 emissions</u>.

1.4 CLIENT REFERENCES & LETTERS OF RECOMMENDATION

Please refer to the following exhibits for Letters of Recommendation:

- Exhibit 1a Letter from Vincent M. Lawrence, Former Chairman of the Electricity Sector Enterprise Team in Jamaica
- Exhibit 1b Letter from Guillermo Turrent, CEO of CFEnergía & CFE International in Mexico
- Exhibit 1c Letter from Kelly Tomblin, former CEO of JPS and CEO during selection, negotiations and commencement of operations by NFE
- Exhibit 1d Letter from James Browne, General Manager of Barbados National Oil Company Limited

NFE References:

- Kelly Tomblin, Chief Executive Officer
 - Company: INTREN

- Address: 18202 West Union Road, Union, Illinois 60180
- Phone: 815-923-2300
- Email: Ktomblin@intren.com
- Vincent M. Lawrence, Former Chairman
 - Company: Electricity Sector Enterprise Team & Generation Procurement Entity in Jamaica
 - Address: 14a Hope Road, P.O. Box 402, Kingston 10, Jamaica
 - Phone: 926-2201-2
 - Email: vlawrence@jentechconsultants.com

James Browne, General Manager

- Company: Barbados National Oil Company Limited
- Address: Woodbourne, St. Philip, Barbados, BB18064, W.I.
- Phone: +1-246-418-5200 / +1-246-418-5205
- Email: brownej@bnocl.com

Dennis Morgan, Chairman of the Board

- Company: Jamalco Bauxite and Alumina Refinery
- Phone: +1-876-578-1326
- Email: dennispmorgan@gmail.com

Guillermo Turrent Schnass, Chief Executive Officer

- Company: CFEnergía and CFE International
- Email: Guillermo.turrent@cfe.gob.mx

Black & Veatch References:

• David Cobb, Vice President, Operations

- Company: Sempra LNG
- Address: 101 Ash Street, San Diego, CA 92101
- Phone: 619-696-4062
- Email: DCobb@SEmpraGlobal.com

Lynnette M. Ramirez Rivera, Executive Director, Infrastructure Division

- Company: Gobierno De Puerto Rico Autoridad de Acueductos y Alcantarillados
- Address: #604 Avenida Barbosa, Hato Rey PO Box 7066, San Juan Puerto Rico 00916-7066
- Phone: (787) 999-1717 ext. 1119
- Email: Lynnette.Ramirez@miamidade.gov

Moffatt & Nichol References:

- Steve Corporon, Director of Port & Harbors
 - Company: City of Ketchikan, Port & Harbors
 - Address: 2933 Tongass Avenue, Ketchikan, AK 99901
 - Phone: (907) 228-6049

- Email; stevec1@ktn-ak.us
- Russell Daya, Executive Director Global Port Operations & Developments, Itinerary & Strategic Planning
 - Company: Disney Cruise Lines
 - Address: 200 Celebration Place, Suite 400, Celebration, FL 34747
 - Phone: (407) 566-4320
 - Email: russell.s.daya@disney.com

1.5 OWNERSHIP STRUCTURE & PROJECT TEAM

NFEnergía LLC is a wholly owned subsidiary of New Fortress Energy Holdings LLC, a United States based limited liability company and an affiliate of Fortress Investment Group LLC. NFEnergía LLC is duly and properly organized in Puerto Rico and is qualified to conduct business in Puerto Rico. NFEnergía LLC has also registered with PREPA's Supplier Registry (see Exhibit 18). Please see Exhibit 46 for the audited financial statements of NFEnergía LLC and Fortress Investment Group LLC as well as the audited balance sheet of New Fortress Energy Holdings LLC.

The key members of the NFE leadership and project management team are indicated below, along with a brief description of their qualifications and experience. NFE and its project team has the staff available to begin working on the project immediately should we be awarded. Please see Exhibit 4 for more information on the NFE team.

1.5.1 NFE Leadership Team and Primary Contact

FOUNDER AND CEO | Wesley R. Edens

Mr. Edens founded New Fortress Energy in 2014 with a commitment to help accelerate the world's transition to clean and renewable energy. Beginning with the development of its first liquefied natural gas (LNG) plant in Miami, Mr. Edens has led the effort to grow New Fortress Energy into a global energy infrastructure business. He has overseen all of the business and market development activities of the company, including the successful partnership with Jamaica to build the country's first LNG terminal and deliver natural gas for three power plant projects.

Mr. Edens is a co-founder and co-CEO of Fortress Investment Group LLC. Fortress, founded in 1998, is a global investment manager with approximately \$40.9 billion of assets under management as of March 31, 2018. Under his leadership, Fortress has developed and owned transportation and infrastructure projects across the world and built industry-leading businesses in real estate, health care, financial services, media and entertainment.

In 2014, Mr. Edens also became a co-owner of the Milwaukee Bucks and led the effort to deliver a new arena to the city of Milwaukee for the NBA franchise. Opening in 2018, the \$524 million Wisconsin Entertainment & Sports Center is the centerpiece of an ambitious development project spearheaded by Bucks ownership to transform 27-acres of mostly vacant property into a vibrant entertainment district.

Mr. Edens has been the catalyst for the development of Brightline, the first privately owned, operated and maintained passenger rail system in the United States that will connect Miami to Fort Lauderdale, West Palm Beach and eventually Orlando.

In addition to serving on a number of professional boards and commissions, Mr. Edens is a trustee and longtime supporter of the U.S. Ski and Snowboard Team Foundation and an active philanthropist. He and his family established The Edens Family Fund for Climate Change Research at Princeton University, a gift that launched the Urban Challenge within the Princeton Environmental Institute. He served as inaugural co-chair of the Brown School of Public Health Advisory Council and endowed a professorship at Macalester College in St. Paul, Minn., the Edens Professorship in Global Health, along with a research fund to focus on solving international infectious disease and environmental health hazards.

Prior to founding Fortress in 1998, Mr. Edens was a partner and managing director of BlackRock Financial Management Inc., where he headed BlackRock Asset Investors, a private equity fund. In addition, Mr. Edens was formerly a partner and managing director of Lehman Brothers.

Mr. Edens received a B.S. in Finance from Oregon State University.

PRIMARY CONTACT AND NFE CHIEF DEVELOPMENT OFFICER | Brannen McElmurray.

Brannen led the development of a series of successful energy related critical infrastructure projects, including a small-scale LNG liquefaction plant that is both truck and rail served; a small-scale LNG receiving terminal integrated with a combined-cycle power plant; a world-scale LNG receiving terminal integrated with a combined-cycle power plant; a combined heat and power generating station providing power to the grid and steam to a world-scale alumina refinery, and is currently developing a portfolio of mid-scale LNG liquefaction facilities in North America. Before Fortress, Brannen was the portfolio director of renewable energy and environmental commodities at NRG Energy, Inc. (NYSE: NRG). Before NRG, Brannen was a vice president in the merchant banking group of Evolution Markets, a leader in energy and environmental markets, where he worked with project developers and entrepreneurs in developing financing solutions for clean energy projects and clean tech companies in the U.S. and abroad. Brannen has also worked for Goldman Sachs Group as an investment banker focused on technology companies and as an attorney at Cravath, Swaine & Moore focused on mergers and acquisitions and acquisition finance. Brannen holds a B.S. in engineering with highest honors from the U.S. Naval Academy, a M.A. in Science, Technology and Public Policy from George Washington University, and a J.D. from Stanford Law School. Brannen served as an officer in the United States Navy. His contact information is as follows:

Brannen McElmurray New York, New York 10011 Office phone: 1-516-268-7413 Cell phone: 1-646-371-7401 Email: bmcelmurray@newfortressenergy.com

CHIEF OPERATING OFFICER | Michael Utsler

Michael is the Chief Operating Officer of NFE. He is a senior executive with more than 40 years of experience in the oil and gas sector. He was most recently COO of Woodside Energy, a leading Australian oil and gas company with a global presence. He has also worked for BP and Amoco in Australia and on numerous US and internationally based assignments, giving him the opportunity to develop and demonstrate a wide range of executive and managerial skills and competencies. He holds a BS in Petroleum Engineering from Oklahoma University and a business degree from the University of Indiana.

1.5.2 NFE Project Management Team

Below are the names and titles of key members of the project team, including from NFE, Black & Veatch, and Moffett & Nichol, with a brief description with the qualifications and experiences of each. Each of the members below have been working on our micro-fuel handling facility project, and each is available immediately for execution of this proposal once selected. More detailed descriptions of experience and qualifications are attached as Exhibit 4.

PROJECT DIRECTOR | Jatila Ranasinghe

Jatila is Head of Power for NFE. Prior to joining NFE, Jatila worked at GE for over 20 years. Throughout his career, Jatila has held a series of leadership roles. Most recently at GE, Jatila was the Senior Executive of Global Product Line and Applications Engineering for the Gas Power Systems business of GE Power. Jatila's team lead global product strategy for the Gas Power product portfolio, including gas turbines, steam turbines, generators, heat recovery steam generators (HRSGs) and combined-cycle power plant solutions. While at GE, Jatila was also part of the Power Generation business in Schenectady, where he worked on the H combined-cycle system, which was the world's first introduction of H technology. Prior to joining GE, Jatila spent six years with the Parsons Corporation in the Oil and Gas division as Senior Heat Transfer Engineer. Jatila holds a PhD and a master's degree in mechanical engineering from Oregon State University, and a bachelor's degree in mechanical engineering from the University of Sri Lanka. He is the inventor of over 40 U.S. patents and has published a number of technical papers.

PROJECT MANAGER | Sam Abdalla

Sam is a Vice President for NFE and is responsible for Development of Distributed Power and Gas Solutions. Sam is an internationally trained mechanical engineer with over 15 years of direct experience in the LNG business, utility-scale energy efficiency, combined heat and power, power generation and central utility plant projects from early stage development to construction and operation. Sam has successfully completed over 25 major power and energy projects in 15 different countries, including the development of the world's largest IPP plant in Saudi Arabia combined-cycle and Cheniere Corpus Christie Liquefaction plant power island.

PROJECT SUPERVISOR | Winnie Irizarry

Winnie is a civil engineer with 10 years of experience in project management, project controls, estimating and procurement in a range of industries and project types. Mr. Irizarry has been a key team

member for the completion of fast-track projects in the energy, oil and gas, pharmaceutical and commercial sectors. He has worked on projects in Puerto Rico, Texas, Miami and the US Virgin Islands. Winnie holds a bachelor's degree of Science in Civil Engineering from Polytechnic University of Puerto Rico. Winnie also has training for cost estimating, project scheduling, Procore project management software, primavera P6 software and 30 hours of Occupational Safety and Health Administration (OSHA) training for the construction industry.

ENGINEERING AND DESIGN MANAGER | Jeff Wootton

Jeff is a Project Manager within Black & Veatch's Power business. Wootton is experienced in managing and executing all phases of power generation project engineering design and planning, including project supervision, scheduling, conceptual and detailed design, thermal performance design, emissions compliance, preparation of procurement and construction specifications, and administration of equipment contracts. Wootton previously served in various roles as a Project Mechanical Engineer on new combined and simple cycle power plant projects; his responsibilities included system design, calculations, equipment specifications, bid evaluations, vendor contract negotiations, vendor equipment drawing reviews, and performance test procedures.

LEAD ENGINEERS | Black & Veatch and Moffatt & Nichol

Angela Stoss is a Project Manager and a Professional Chemical Engineer, licensed in Puerto Rico, Kansas and Minnesota, supporting Oil & Gas projects at Black & Veatch. She holds a Master's degree in Business Administration with an emphasis in finance and a Bachelor's degree in Chemical Engineering. Stoss applies engineering skills in support of projects, with responsibilities including process simulation, preparation of PFDs, P&IDs, and detailed engineering documents and drawings. Her additional responsibilities include client, engineering, and project management.

Takeharu (Tak) Koga is a Professional Engineer, licensed in Puerto Rico. Tak works within Black & Veatch's global energy business, holds a Master's Degree in Electrical Engineering, and offers over 20 years of relevant experience in the Power, Oil & Gas, and Process industries. Koga's experience includes Instrumentation & Control (I&C) design and engineering, from front-end and conceptual design, through detailed design, to commissioning & startup, working on coal-fired & oil-fired power generating facilities, combined-cycle facilities, amine-based carbon capture & sequestration (CCS) facilities, petrochemical facilities, and bioprocessing facilities. Koga has worked on both domestic and international projects. He also has led an engineering section, managed all aspect of electrical, I&C engineering, including design quality, design procedure, and resource management.

Jeremy Braithwaite is a Professional Mechanical Engineer, licensed in Puerto Rico had has 17 years power plant and industrial design experience. Mr. Braithwaite has experience in power plant design, field installation, cost estimating, startup, operational and failure analysis. This experience includes work on subcritical, supercritical, cogeneration, simple cycle and combined-cycle power plants. His experience also includes retrofit projects for both industrial, process and power generation facilities.

Prasanna Naware is a Professional Electrical Engineer, licensed in Puerto Rico with over 10 years of experience in electrical auxiliary power system design within the Oil & Gas and Power Industry. Prasanna is experienced in detailed engineering design projects, front end engineering design projects

and engineering proposals. Prasanna has 5 years of field design engineer experience within the petrochemical industry. Prasanna's design experience includes electrical equipment sizing, development of electrical equipment specifications, power system analyses, procurement requisition development, bid technical evaluations and contract management, development of engineered drawings, including one and three line diagrams, elementary schematics and wiring diagrams. Prasanna also has field instrumentation and DCS programming experience.

Alap Shah is a Vice President and Project Director for Black & Veatch and is responsible for the review, selection and application of technologies, risk identification and mitigation of a first-of-a-kind technology integration in power generation projects. Alap specializes in several thermal cycle analysis computer programs and has modeled various cycle configurations for many projects, including repowering projects. He has prepared and conducted combined-cycle performance tests and analyzed the performance of existing units based on test data.

Deborah MacPherson has more than 18 years of experience working in the marine civil and structural engineering field as a port facilities designer, structural engineer, senior project manager, owner's engineer and resident engineer. She is registered in Puerto Rico, Florida, New Hampshire and Louisiana. Her expertise is in inspection, assessment, planning, design, construction document preparation, and post-construction award services for waterfront civil and structural projects with a focus on design of new and renovated waterfront structures. She completes these projects for a variety of public and private clients such as the Florida Department of Transportation, U.S. Navy, Coast Guard, and Air Force; municipal and state governments; container and bulk terminals; shipyards; and terminal owners.

Derek Sears has been working in the electrical engineering field for eight years. He is registered in Puerto Rico, Florida, the US Virgin Islands and the District of Columbia. His experience is in the design of commercial and industrial power distribution, lighting, and electrical systems. In addition to electrical design, he has provided construction support for projects that have included low and medium voltage electrical, mechanical pump and conveyor systems, fire protection, life safety, security and communication/controls systems. With respect to waterfront facilities, Mr. Sears has been involved in the development and/or electrical system studies of bulk material and liquid product loading/unloading facilities, port container terminals, marinas and offshore substations. These designs and studies have included the use of the electrical power system design and analysis software (ETAP) to support and confirm load flow, fault current, arc flash and over-current protection coordination efforts and results.

John Glass is a structural engineer with 6 years of experience in the design of waterfront structures with expertise in the management, inspection, planning, design, construction document preparation, and post-construction award services for a variety of ports, marinas, and other waterfront facilities. In addition to structural engineering, he has over 15 years of experience providing construction oversight for projects that have included general construction, mechanical, fire protection, life safety, electrical systems, and small scale liquified natural gas (LNG) transfer facilities Mr. Glass will provide coordination between various design firms and equipment vendors supporting the project during the design and construction phases of the terminal project.

Ryan Hare has 12 years of professional experience in the technical, managerial and commercial aspects of ports, harbors and marine terminals internationally. He has served as Project Manager or Project

Engineer for a wide variety of maritime projects involving planning, design, preparation of contract documentation and client advisory services. This planning and design experience has included overall layout of both inland and offshore, domestic and international port facilities for general, liquids, bulk and container cargoes as well as specific port components.

Inspector Manager, Luis Martinez. Luis is the President of Professional NTD Services. Luis has extensive certifications and training in inspections, including for vessels, welding and piping. Luis is a member of the American Society for Engineers, the American Welding Society, the American Water Works Association and the American Society for Nondestructive Testing. For more detailed information on the company and expertise please see Exhibit 10.

Safety Officers, QA/QC Managers, Environmental Specialists: George Ibave (supported by Tim Sabol, Health, Safety, Environmental & Quality Manager and Christina Riccelli, Vice President of HSEQ).

George is the Head of Health, Safety, Environment and Quality at NFE. George leads field HSE Operations and ensures all Health, Safety, Security, and Environmental management aspects and regulatory compliance requirements are diligently met per project contract's terms and conditions. George strongly believes in driving a culture of safety by setting the example, through education, stewardship, and active mentoring. George's professional experience spans 14 years, through 6 heavy industry sectors including US military, building materials, specialty gases, explosives and munitions, fuels and logistics, and LNG; within 10 countries across North, South America, and the Caribbean. George holds a Bachelor's of Science Degree in Chemistry with a specialty in Materials Chemistry and Mathematics from the University of Texas at El Paso. Specialized skillset includes Lean Six Sigma, Process Safety Management, and Environmental.

Head of Operations, Simon Duncan. Simon is Senior Vice President and Head of Marine Operations for New Fortress Energy with over 28 years of experience in the marine and energy industries. Prior to joining New Fortress Energy, Simon was President and CEO at SPT Inc., a global provider of ship-to-ship transfer services and management of high-pressure gas terminals used by floating and regasification units (FSRU). Prior to that, he held various senior management roles at SPT. Over his career he was instrumental in the development of LNG ship-to-ship transfers and its role for LNG bunkering operations. Simon holds a B.A. in International Business from Texas Wesleyan University.

Head of Marine Development, Captain Mark Lane. Captain Mark Lane is a Senior Vice President responsible for Marine Development. Mark's team handles all elements of construction and conversion for a variety of vessels including LNG carriers, floating storage terminals, and regasification barges. During his career, Mark developed the original concept of the Floating Storage and Regasification Unit (FSRU) and the offshore and near-shore natural gas receiving facilities for those vessels. Mark has developed, commissioned and operated nine FSRU's, including the two highest capacity regas send-out vessels in the world. Mark has successfully developed, commissioned and been responsible for over 1,000 ship-to-ship operations in his career without incident. Mark graduated Summa Cum Laude with an ME in Nautical Science from the Maine Maritime Academy and received an MD in Liquefied Natural Gas engineering from Calhoon MEBA Engineering School in Baltimore, MD.

Head of Logistics, Alex Vohr. Alex is the Vice President of Logistics at New Fortress Energy with more than 28 years of experience in operational and strategic level logistics. Prior to New Fortress Energy,

Alex served at Florida East Coast Railway as the Assistant Vice President for Operating Policy where he coordinated the operational integration of LNG fueled locomotives. Alex is a retired Colonel in the United States Marine Corps with 25 years of active service including combat, humanitarian assistance operations, and assignments as a planner, educator, and acquisition professional. In his last assignment, Alex served as the Director for Logistics, U.S. Southern Command, responsible for all U.S. military logistics in Central and South America. He holds multiple advanced degrees and completed his undergraduate education at the United States Naval Academy.

1.5.3 Engineer - Black & Veatch

Black & Veatch (B&V) is a leading engineering, consulting and construction company. Since 1915, they have grown and developed offerings to provide the most comprehensive services to clients across the globe. With more than 3,000 assignments in more than 40 countries, they have a proven performance record in safety, reliability and environment enhancement.

B&V applies accurate planning, leading technologies, proven EPC practices and reliable operations solutions for oil & gas, power generation and power delivery infrastructure. Their global projects are consistently recognized throughout the energy industry for quality and best practices.

In combustion turbine plants alone, B&V has been involved with 120+ GW of power generation facilities. Their combined-cycle leadership includes the design and construction of more than 130 global projects totaling more than 84GW.

In addition to the design of power generation facilities, B&V has been on the leading edge in applying new concepts to LNG utilization. B&V has developed proprietary technologies in LNG, liquefied petroleum gas (LPG) recovery, and sulfur degassing, among others.



A recent project in Puerto Rico involved the integration of an LNG receiving terminal with an electric power plant. The process utilization, shown in the figure to the left, illustrates this unique integration project. The LNG is pumped from storage and is vaporized by exchange with a glycol/water system. The chilled glycol/water is used to chill the inlet air in the power plant combustion turbines. Additional power is generated in the power plant because of this chilling. The vaporized LNG is used for the turbine fuel and excess sold to a gas pipeline. The steam system in the combined-cycle

power plant also serves as a heat source for seawater desalination. Boil-off gas from the LNG storage is used directly as turbine fuel and eliminates the need for a BOG condenser. This integrated process provides an efficient way to utilize cold energy from the LNG that is otherwise often discarded against vaporization systems using seawater or fuel firing.

Please refer to Exhibit 5 – Black & Veatch Qualifications.

1.5.4 Engineer – Moffatt & Nichol

Moffatt & Nichol is a global infrastructure advisory firm working from 36 offices and 7 countries. They provide practical solutions to clients in the marine terminal, transportation, energy, environmental, federal, and urban development markets around the world. They are a multidiscipline professional services firm with specialized expertise in structural, coastal, and civil engineering; environmental sciences; economics analysis; inspection & rehabilitation; and program management solutions.

Please refer to Exhibit 7 – Moffatt & Nichol Qualifications.

1.5.5 Contractor - TSK

TSK has over 30 years of experience in the industrial and energy sectors. They are a Spanish company involved in many EPC projects in the energy, industrial, minerals handling and environment sectors. They have 97% international activity, showing experience in a variety of jurisdictions, and have sufficient financial capacity to handle large EPC projects.

TSK has been executing projects for the transportation of oil and gas for over 30 years, and has been involved in constructing all types of related installations and infrastructure. Their projects include oil and gas pipelines, gathering systems and distribution networks, oil pumping stations, gas compression stations, and oil and gas metering Stations.

TSK develops complete hydrocarbon storage terminals, in addition to its corresponding oil tanker mooring terminals and the port-refinery interconnection. They also provide knowledge and experience necessary to design the LNG tanks as well as regasification terminals. NFE has worked with TSK to develop its Jamalco project and TSK has proven to be a reliable and effective contracting partner.

Please refer to Exhibit 9 – TSK Qualifications.

1.5.6 Local Partners

NFE has already engaged numerous local parties for work relevant to the supply of natural gas to San Juan Units 5 & 6, and if awarded the contract, NFE would continue to engage more local parties that would be integral to fuel conversion of San Juan Units 5 & 6 and natural gas fuel supply. More details on local party expertise and technical qualifications can be found in Exhibits 11-17.

To date, NFE has already engaged the following local parties in connection with the preparation of the micro-fuel handling facility that would be used for the supply of natural gas.

LOCAL PARTY	WORK COMPLETED OR ONGOING
Black & Veatch Puerto Rico, PSC	Engineering
KPMG Puerto Rico	Advisor on accounting and tax issues
Puerto Rico Ports Authority	Lease in the Puerto Nuevo section of San Juan Harbor

Table 1-1 - List of Engaged Local Partners

LOCAL PARTY	WORK COMPLETED OR ONGOING
Sanabria Bauermeister Garcia Berio	Advisor in connection with port lease, employment and tax matters
Edge Legal Strategies	Advisor in connection with environmental and permitting matters
Fortress Maritime	Logistics and facility security support.
Arqueo Consulting	Phase 1A and 1B archeological study and monitoring throughout construction process of the MFH Facility
Toledo Engineering	Abatement of lead-based paint and asbestos and demolition of existing warehouses on Wharves A and B
Javier Bidot & Associates, PSC	Survey of warehouses in contemplation of demolition and survey of port subsurface in contemplation of Phase 1B archeological study
Tetratech Puerto Rico	Environmental consulting and permitting
Luis A. Ayala Colon Sucrs, Inc.	Stevedoring services

Should NFE be awarded the contract, local parties would be integral to NFE's performance of PREPA's fuel conversion and fuel supply requirements. Below is a preliminary list of Local Parties that NFE expects would be part of the implementation team. The list would likely grow as the work progresses and more parties are engaged.

Table 1-2 - List of Local Partners to Engage

LOCAL PARTY	EXPECTED ROLE	KEY PERSONNEL	EXPECTED LEVEL OF INVOLVEMENT / INTERACTION WITH PREPA				
Sanabria Bauermeister Garcia Berio	Advise on port matters	Jorge Fernandez, Reboredo partner	Limited to no direct contact, availability through NFE to answer questions				
Edge Legal Strategies	Advise on environmental and permitting matters	Carlos Lopez, senior counsel	Limited to no direct contact, availability through NFE to answer questions				
KPMG	Advise on accounting and tax-related matters	Rolando Lopez, partner	Little to no direct contact, availability through NFE to answer questions				
Black & Veatch Puerto Rico, PSC	Engineering	Rafael Frias	Little to no direct contact, availability through NFE to answer questions				
Fortress Maritime	Logistics and security support, including access and security services at Wharves A and B	David Hancock, Aaron Vick	Periodic interaction related to access to Wharfs A and B.				
Professional NDT Services	Quality Assurance / Control and Inspection Services, Welding Inspections (x-rays, etc.)	Luis Martinez, President	Little to no direct contact, availability through NFE to answer questions				

LOCAL PARTY	EXPECTED ROLE	KEY PERSONNEL	EXPECTED LEVEL OF INVOLVEMENT / INTERACTION WITH PREPA				
Jaca Y Sierra Testing Laboratories	Geotechnical Engineering Services, Concrete Testing during construction	Carlos R. Sierra del LLano	Little to no direct contact, availability through NFE to answer questions				
Del Valle Marine	Marine Construction, Berth Repairs	Humberto Reynolds	Little to no direct contact, availability through NFE to answer questions				
Lord Construction and Lord Electric	General Contracting, Mechanical Piping, concrete work and Steel erection	Javier Perez Sanfeliz, Hector Almodovar Garcia, Israel Esparra Vazquez	Little to no direct contact, availability through NFE to answer questions				
Aireko Construction	Concrete, Steel, Mechanical Construction	Waldemar Toro Davila	Little to no direct contact, availability through NFE to answer questions				
CIC Construction	Concrete, Steel, Mechanical Construction	Jose Torrens	Little to no direct contact, availability through NFE to answer questions				
Tetratech	Environmental and permitting	Fernando Pages	Little to no direct contact, availability through NFE to answer questions				

1.6 LIST OF EXHIBITS

The following exhibits are included in the appendix:

- 1. New Fortress Energy Letters of Recommendation
 - a. Vincent M. Lawrence, Former Chairman of the Electricity Sector Enterprise Team in Jamaica
 - b. Guillermo Turrent, CEO of CFEnergía & CFE International in Mexico
 - c. Kelly Tomblin, Chief Executive Officer of INTREN
 - d. James Browne, General Manager of Barbados National Oil Company Limited
- 2. Black & Veatch Letters of Recommendation
 - a. Energía Costa Azul LNG Regasification Project
 - b. Port Westward Project
 - c. Enmax Shepard Energy Centre Project
 - d. Puerto Rico Aqueduct and Sewer Authority (PRASA)
- 3. Moffatt & Nichol Letters of Recommendation

- a. City of Ketchikan, Port & Harbor
- b. Disney Cruise Lines
- 4. New Fortress Energy Key Personnel Bios
- 5. Black & Veatch Qualifications
- 6. Black & Veatch Key Personnel Bios
- 7. Moffatt & Nichol Qualifications
- 8. Moffatt & Nichol Key Personnel Bios
- 9. TSK Qualifications
- 10. Professional NDT Services Qualifications
- 11. Anthony Veder Qualifications
- 12. Aireko Companies Qualifications
- 13. CIC Construction Group Qualifications / Key Personnel Bios
- 14. Del Valle Group Qualifications
- 15. Lord Electric Co. of P.R., Inc. Qualifications
- 16. Lord Construction Qualifications / Key Personnel Bios
- 17. L.P.C. & D., Inc. Qualifications
- 18. PREPA Supply Registry Confirmation



SECTION 2.0

Approach & Methodology



2.0 Approach & Methodology

2.1 PROJECT SCOPE OF WORK DESCRIPTION

NFE is currently developing its micro fuel handling facility (MFH Facility) which, upon bid award, will include the equipment and controls necessary and capable of providing 25 TBTU per year of natural gas to San Juan Units 5 & 6. Expansion at the MFH facility would also give NFE the available space and capacity to support additional installed capacity at San Juan Power Station or elsewhere on the system. The construction and commissioning of all equipment and interconnection necessary for a complete unloading, storage, vaporization and delivery of natural gas to the existing San Juan Units 5 & 6 Power Generating Plant is included within this proposal.

The scope of work will include, but is not limited to:

- Gas pipe routing, which will be selected based on codes and standards and minimal interruption to PREPA operations
- Dedicated Auxiliary Equipment, including control valves, gas evaporator, heater or heat tracer and compressor to comply with combustion turbine's manufacturer recommendations, relief valves, stop valves, safety vent valves, safety shut down valve at fuel gas turbine manifold, overspeed trip valve, fuel gas meter, metering station for financial custody and coalescent filters
- Any required improvements to the dock per NFPA, Ports Authority and USCG compliance and for any recertification due to the change of use (though there is no change of use or related recertification anticipated by NFE)
- Electronics and Communications: for all operation, control and supervisory signals from auxiliary equipment, gas conveyance, metering station and LNG storage and vaporizer system will be integrated to the San Juan Units 5 & 6 DCS
- All steel surfaces will be painted with a three coating system for corrosive environment and UV protected or similar protective measures
- Fuel Gas Meters: The two separate flow meters will be installed comprising a main meter and a backup meter. The metering equipment will be installed in a location to be mutually agreed between NFE and PREPA. The metering equipment shall be designed and installed in accordance with the current recommendations of the American Gas Association.
- NDT to all welds; 100% x-Rays, hydrostatic test
- Cathodic protection applied to system
- Fire protection system modification as required by codes and local and federal regulatory agencies
- Gas leak sensors with heat and temperature sensors
- NFE will manage and take responsibility for all mechanical, electrical, civil and site works
- Construction drawings and as-built drawings
- Construction will consider hurricane winds of 145 MPH and comply with Seismic User Group 3

Combustion turbine manufacturer's recommendation of natural gas parameter at the combustion turbine's gas control skid (pressure 350-640 psi, flow 27.43 MMBtu/min per Unit, temperature a minimum of 50 degrees F above natural gas dew point, each as recommended by Mitsubishi).

2.1.1 Overview of Approach & Schedule

Because of the magnitude of the potential cost savings, NFE understands the value of time and a compressed execution schedule. We have already begun detailed engineering and design on the PREPA power plant conversion with our engineering firm, Black & Veatch, using information supplied by your preferred supplier, Mitsubishi. With respect to our MFH Facility, we have received an approved Environmental Assessment and Jones Act letter; filed our infrastructure endorsements; completed the Coast Guard LOR process; and started the filing process for the various construction permits required for the MFH Facility. We have completed the demolition process for warehouses on the site of the MFH facility and are now preparing for civil and structural sitework. The long lead items for the MFH facility align with the San Juan Power Plant lead times and procurement can advance without delay after notice to proceed.

NFE and its supporting contractors understand the integration of all parties for engineering and design, procurement, construction, and permitting to meet the project schedule. The summary-level CPM schedule below outlines the key milestones of the project and shows how NFE, Mitsubishi Hitachi Power Systems, Black & Veatch and Moffatt & Nichol are currently working together and plan to continue to work together to achieve the project timeline. The schedule below dovetails with the division of responsibilities for the LNG design at the MFH facility, the San Juan Power Plant conversion process, the balance of plant work, and all additional contract work identified.

				S	an Juan	15&6 N	atural	Gas	Con	version	Project	t				
							Mor	nths								
Jul-18	Aug-18	Sep-1	18	Oct-18	Nov-18	Dec-18	Jan-19	Feb	b-19	Mar-19	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-1
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	PRE	PA RFP	' Proc	ess												
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		(00)(1)			Mobilizati	on					Gas Ava	1.1.1				
	IVI&N/	/B&V LI	NGDe	_		n /Envire 1	to - U - t	10		-	Gas Ava	lable				
	1			LING C	ònstructio	n/Equip. I	nstallatior	1/Com	nmiss	ioning						
		Full	NTD									CTC Car	Comunette	on Comple	L	
				Convorci	ion Parts D	o cign and	 Fabricatio				Outage		Conversion	T	le	
	1			Conversi	ion Farts D	esign and	Fabricatio			I	Outage					
	B&V Pov	uor Pla	nt BO	PDesign	1											
			1	i Design												
					NTP		Power S	l Site M	lobiliz	ation						
	Power Co	ntracto	or Bid	Process	Contractor N	laterial Proc				and Start	up					
			1		Contractor											
	1													1	1	
	1													1		
	1															8/8/2

Figure 2-1 – CPM Schedule

2.1.2 Project Concept and Description

The San Juan Power Plant is a six-unit facility consisting of four (4) liquid fuel fired boiler and steam turbine units and two (2) one-on-one liquid fuel fired combustion turbine combined-cycle units. Each combined-cycle unit consists of a Westinghouse 501FC combustion turbine and Ansaldo heat recovery steam generator (HRSG) that repower an existing steam turbine. Designed net plant output rating was 232 megawatts (MW) per combined-cycle unit. The combustion turbines fire #2 diesel and the HRSGs do not include supplemental duct firing.



Figure 2-2 - San Juan Power Plant



Figure 2-3 - San Juan Units 5 & 6 Combustion Turbines

The intent of the gas conversion project is to modify each combustion turbine at Units 5 & 6 to use natural gas as a primary fuel and #2 diesel as an emergency backup fuel. As part of this conversion, PREPA could decide to retrofit each combustion turbine with a cold-water inlet air coil that can be used to reduce the combustion turbine inlet air temperature approximately 15 degrees F, thus increasing each combined-cycle unit's net plant output capability.

NFE's MFH Facility is designed to receive LNG from a semi-permanently moored floating storage unit (FSU) at Puerto Nuevo, vaporize the LNG on Wharfs A and B and deliver vaporized LNG to Units 5 & 6. NFE has selected the FSU and ships for delivering LNG to meet the 7-day storage requirement. Given the estimated gas consumption calculated using assumptions provided by PREPA, the solution described herein contains up to 116 days of storage. In addition, NFE is developing an onshore storage solution to provide additional storage and operational flexibility in the event that the energy and natural gas requirements of the San Juan Power Plant or PREPA generally grows. As you know, the process of siting, permitting, designing, and constructing a landed LNG storage facility can take a number of years.

An ambient air vaporizer will be installed to provide the required fuel gas flow for the gas-fired heater during start-up. Piping connections will be included for the expansion of the facility's vaporization capacity and sendout.

The vaporization facility has the capacity, at PREPA's option, to employ a water/glycol loop integrated with the San Juan Power Plant as the primary heat source for LNG vaporization. The water/glycol loop would provide cooling to the inlet air of the combustion turbines, increasing their generation capacity and net plant electrical output of each combined-cycle unit. A gas-fired, water bath vaporizer would be available as an additional heat source to the water/glycol loop for use as back-up or trim heating.

A gas combustion unit or flare will be installed for operational activities of the MFH Facility to prevent gas releases during typical procedures, including commissioning or maintenance. The FSU is designed to accommodate any boil off gas generated within the FSU. The MFH Facility is capable of receiving the vapor via the Boil-off Gas (BOG) compressor to be sent as fuel or used in the gas combustion unit if desired by MFH Facility and FSU operators.

2.1.3 Proposed Project Location and Siting

The MFH Facility proposed for handling LNG will be located in the Puerto Nuevo section of the Port of San Juan (Puerto de San Juan), a seaport facility located in the metropolitan area of San Juan, Puerto Rico, that is adjacent to the PREPA San Juan Power Plant. The "Port of San Juan" is the general name used to refer to the various passenger and cargo facilities located in lands around the San Juan Bay (Bahía de San Juan). The MFH Facility will be located immediately adjacent to the San Juan Power Plant on the parcel with cadaster number 062-000-003-01. NFE also has rights to conduct LNG transloading operations, including berth space for our LNG carrier, at Wharf C. Therefore, Wharf C is not a suitable location for any other project proponent because we believe that they would be unable to meet the duty requirements outlined in this RFP.

2.1.3.1 Site Conditions and Site Constraints at the MFH Facility and San Juan Power Plant

Wharves A, B, and C comprise approximately 9 acres (9.27 cuerda), or approximately 36,422 square meters. Wharves A and B were each occupied by a detached warehouse building which NFE has demolished. Wharf C consists of an open area without buildings. All onshore areas are paved and the project will not require any changes to the bulkhead's current footprint or layout.

According to Zoning Map Number 5B of the Autonomous Municipality of San Juan, (effective March 13, 2003), the MFH Facility is located within the territorial limits of San Juan in a heavy industrial (I-2) district on lands currently used for load transfers and is classified as Urban Land.

Pursuant to the Joint Regulation of Permits for Construction Works and Land Use, Regulation No. 7951 ("Joint Regulation"), the heavy industrial district is established to classify heavy industrial areas, developed or to be developed by specific projects, which by nature and intensity require special siting. Under Section 19.12.1(b) of the Joint Regulation, the determination of the extension of land considered for heavy industrial uses should be based on: potential of the area for development of heavy industries; wind direction; detrimental effects on air and water, such as odor, noise, vibration, and light reflection; effects on transportation systems; and the better use of land. The objective is for such land to be dedicated to heavy industrial uses, and residential, commercial, and light industrial uses are excluded.

Section 8.04(a) of the Municipality of San Juan Zoning Regulation contains very similar language concerning the purpose and objectives of the I-2 district.

Both the Joint Regulation and the Municipality of San Juan Zoning Regulation provide a list of authorized uses within the heavy industrial district which include manufacturing, treatment, processing, refining, and storage of chemical substances. Consequently, the proposed use of the site where the MFH Facility will be located would be entirely consistent with the purpose and objectives of the heavy industrial district.

2.1.3.1.1 Flood Zone

The MFH Facility is located in an area subject to coastal flooding according to flood maps prepared by FEMA. The MFH Facility is partially located within a VE Flood Zone with a Base Flood Elevation (BFE) of 3.4 meters (11.15 feet), indicating that in a flood event, waters are expected to rise to 3.4 meters above mean sea level (AMSL) (Flood Insurance Rate Map (FIRM) 72000C0365J, revised November 18, 2009). Additional portions of the MFH Facility are located in the adjacent AE Flood Zones with BFE of 1.8 meters (5.90 feet) and 2.1 meters (6.89 feet). According to a recent survey, elevations throughout the site where the MFH Facility will be generally range between 8 feet and 6 feet with top-of-curb elevations along the bulkhead between 8.17 feet and 7.81 feet (west to east).

Structures to be constructed for the MFH Facility will comply with applicable regulations for construction within VE Flood Zones with a known BFE of 3.4.

2.1.3.1.2 Natural Habitat

Regulation No. 6765 of the Department of Natural and Environmental Resources of Puerto Rico (February 11, 2004), is known as the Regulation to Govern the Conservation and Management of Wildlife, Exotic Species and Hunting in the Commonwealth of Puerto Rico. The purpose of this Regulation is to establish a mechanism for the mitigation of natural habitats, among others. Section 2.03 (B) provides a list of the different habitats categories to determine the mitigation required due to a modification of a natural habitat, these are irreplaceable habitat, essential habitat, high ecological value habitat, ecological value habitat, natural habitat with great potential to become essential habitat, of high ecological value or of ecological value; and natural habitat with low potential to become essential habitat, of high ecological value or of ecological value.

According to the Map of Natural Protected Areas of Puerto Rico (Gould et al., 2011), the MFH Facility and the San Juan Power Plant are not within a designated habitat within these categories. The sites are located along a section of the industrial waterfront at the southern edge of San Juan Harbor.

The closest natural area is *Las Cucharillas Marsh Natural Reserve* located approximately 800 meters to the west of the Project Site. The *Caño Martín Peña Nature Reserve* is located approximately 2,600 meters to the east, and the San Patricio Urban Forest at 2,100 meters to the southeast. None of these habitats will be impacted by the proposed action.

The Puerto Rico Critical Wildlife Areas document (Ventosa-Febles, et al., 2005) provides comprehensive information on important wildlife and habitat resources in Puerto Rico. The purpose of this document is to protect and preserve critical wildlife habitats from degradation due to incompatible land use in a

specific site or adjacent to the site area. The document includes *Las Cucharillas Marsh* as an "area with conservation priority" and the *Buchanan Haystack Hills* and Fort Buchanan Pond (2,100 meters to the southwest), as "critical wildlife areas." The most recent information was obtained from the Critical Wildlife Areas of Puerto Rico Map (2018). None of these habitats will be impacted by the proposed work at the MFH Facility site or the San Juan Power Plant. Thus, no mitigation or protection activities will be required under this regulation.

2.1.3.1.3 Drinking Water Wells

A database search did not identify any public water supply wells within one mile (1,609 meters) of the MFH Facility. This search did identify one water well between ¼ and ½ mile (400 to 800 meters) from the MFH Facility and nine additional water wells between ½ and 1 mile from the MFH Facility. These wells are included in the USGS National Water Inventory System (NWIS), a database that contains descriptive information on sites where the USGS collects or has collected data on surface water and groundwater. Several of these wells date to the mid 1940's, so it is not clear from the database whether any of these wells are still in use. Work at the MFH Facility and the San Juan Power Plant would not impact these wells.

2.1.3.1.4 Regional Geology

Puerto Rico is dominated by the "Cordillera Central," a mountain axis of faulted, folded volcanoclastic and sedimentary rocks intruded by igneous rocks that are overlain by limestones on the north and south (Miller et al., 1999). The Geological Map of the San Juan Quadrangle, published by the USGS, indicates that the Project Site is located on artificial fill (Qaf - artificial fill). The map does not show geological faults in the property under evaluation.

2.1.4 Ownership or Control of Location

NFE has control of the land adjacent to San Juan Power Station in the Puerto Nuevo area of the Port of San Juan, Puerto Rico (the "Port") through lease AP-17-18-(4)-089 with the Puerto Rico Ports Authority ("PRPA"). The leased premises in the Port, which are immediately adjacent to PREPA's facility where San Juan Units 5 & 6 are located providing direct access to natural gas from our facilities. NFE's lease with PRPA allows it to make improvements on the Port to develop the MFH Facility. In addition, NFE has the rights at Wharf C to operate its LNG transloading operations, including space for an LNG carrier. Therefore, Wharf C would not be a suitable location for another project proponent. NFE has gone through an Environmental Assessment in Puerto Rico and has received approval for its MFH Facility as currently configured. NFE has begun making allowable improvements to Wharfs A and B, including by hiring a subcontractor to perform lead and asbestos abatement on two warehouses on the leased area and subsequently demolishing those warehouses.

If PREPA awards the bid to NFE, we will add the necessary equipment to support the improvements on Wharfs A and B and include a fuel unloading facility to deliver fuel to the converted San Juan Units 5 & 6. We expect the work required to add the necessary equipment to go quickly. We have secured the long-lead items, so we have the ability to execute on a compressed schedule.



Figure 2-4 - Area Map

Figure 2-5 - Existing Area Map





Figure 2-6 - Rendering of Facility (bird eye view)

Figure 2-7 - Rendering of Facility (NE view)





Figure 2-8 - New Piping Systems Model View (looking northwest)

Figure 2-9 - New Piping System Model View at Unit 6 (looking east)


2.1.5 Alternative Fuel

We note the opportunity in the RFP to convert and supply PREPA Units 5 & 6 to an alternative fuel rather than natural gas. In order to assess the viability of conversion to use an alternative fuel, we asked Mitsubishi Hitachi Power Systems to provide to us their assessment of the feasibility of converting Units 5 & 6 to operate on LPG (liquefied petroleum gas) in addition to diesel or natural gas.

Mitsubishi Hitachi Power Systems reviewed our request to convert Units 5 & 6 to LPG in comparison to our proposal to convert Units 5 & 6 to operate on natural gas and provided us with the results of their assessment in the letter attached as Exhibit 26. Mitsubishi Hitachi Power Systems concluded that a conversion to natural gas is preferable to a conversion to LPG due to the operational and safety risks related to LPG. In addition, Mitsubishi Hitachi Power Systems could not provide us with a firm price or schedule for an LPG conversion.

We were especially focused on the increased safety risks of converting Units 5 & 6 to LPG. These risks are outlined in Section 2 and Section 3 of Exhibit 26 and, as Mitsubishi states, include significant risk of explosion and injury. These risks also increase the cost of insuring the conversion and the plant post-conversion which would increase the cost of the conversion and plant's operating expenses.

Because of Mitsubishi's concerns, we did not include a bid to convert Units 5 & 6 to run on LPG and supply PREPA with LPG as fuel. If, despite Mitsubishi's concerns, PREPA decides to convert Units 5 & 6 to run on LPG and Mitsubishi agrees it is the best path forward, NFE is willing to consider providing a competitive bid to convert the Units and supply LPG in addition to LNG.

2.2 POWER PLANT CONVERSION OVERVIEW

2.2.1 Power Plant Conversion

New balance-of-plant systems necessary to support the project and combustion turbine modifications include the fuel gas supply system, which transfers the natural gas from the LNG facility at Wharfs A and B to the combustion turbines supplied by Mitsubishi, and the CT Inlet Air Chilling system, which is an option PREPA could choose to implement that would increase capacity of each Unit and would optimize the conversion of Units 5 & 6. Preliminary piping and instrument diagrams (P&IDs) for these systems are provided in Exhibit 22. The new balance-of-plant systems will be designed, constructed, and tested in accordance with ASME Code for Pressure Piping, B31.1 Power Piping-2018.

In addition, Mitsubishi has agreed to be our subcontractor should we be awarded the conversion project. Please see Exhibit 26 for a further explanation of Mitsubishi's commitment and analysis of the natural gas conversion project.

2.2.1.1 Fuel Gas Supply

The fuel gas supply system will deliver natural gas to each combustion turbine. The system will be constructed of seamless, carbon steel piping of all welded construction with flanged system isolation valves including an emergency, air-actuated isolation valve. The system will operate at nominal conditions of 525 psig and 48 degrees F. A gas filter or strainer will be provided immediately upstream of the gas supply interface connection with Mitsubishi, meaning upstream of each combustion turbine fuel gas metering skid. System piping downstream of each filter or strainer will be seamless stainless

steel. The system will also include a flow meter for each combustion turbine supplied by Mitsubishi to ensure proper system operation and safety.

2.2.1.2 CT Inlet Air Chilling

The CT Inlet Air Chilling system is an option that PREPA may decide to implement in order to increase the capacity of Units 5 & 6. NFE believes this optimization of the conversion of Units 5 & 6 would achieve commercially reasonable improvements in output in conjunction with the conversion, as requested on page 9 of the RFP. This optimization would increase the capacity of Units 5 & 6 from 440 MW to 465 MW.

The CT Inlet Air Chilling system will include independent glycol-water cooling water closed loop piping systems for each combustion turbine. Refer to system P&ID in Exhibit 22; drawing #P199399-CTGP-M2626. Cooled glycol-water will be supplied to the power plant from the LNG vaporization process. The glycol-water is piped to a fin-tubed, inlet air cooling coil located within the filter house of each combustion turbine. Warm glycol-water is then returned to the LNG vaporization process. Each combustion turbine's closed loop system includes an air-actuated isolation valve on both the supply and return piping runs near the LNG process interface points. Instrumentation is also included for monitoring glycol-water supply and return process conditions from the San Juan Unit 5 & 6 distributed control system.

2.2.1.3 Combustion Turbine Modifications

Major combustion turbine modifications include new dual fuel capable fuel nozzles, fuel gas metering system, and existing control system expansion to accommodate monitoring, control, and operation of the dual fuel systems. The scope of work will also include modifications to existing liquid fuel systems including liquid fuel metering system, fuel oil injection pump skid, purge air system, sweep air/sweep gas systems, and hydraulic control oil skid. See Project Execution, Section 2.4.7 for the fuel conversion scope of work summary and division of responsibility between NFE, Mitsubishi, Black & Veatch and other contractors.

2.2.1.4 Transient Load Management

The MFH Facility is designed to accommodate safe start up, shut down and load ramp rates for San Juan Units 5 & 6. During the plant start up, natural gas will be supplied at the required pressure to the gas turbines by controls designed to maintain vaporization in line with the demand. The plant control system will be integrated with the MFH Facility. Similarly, when the power plant trips, the control system integration will ensure that the gas pressure in the piping and equipment will remain within the design limits for a safe shutdown.

During the ramp up and ramp down of gas turbines, the LNG vaporizer system is designed to maintain the system pressure in a steady state mode. The system is designed with double redundancy for high reliability and availability of the power plant.

2.3 LNG DELIVERY & NATURAL GAS FUEL SUPPLY LOGISTICS AND OPERATIONS

2.3.1 LNG Delivery Operations and Equipment

NFE constitutes one of the only groups in the world that has developed a landed LNG terminal, a floating storage hub for LNG, an offshore terminal utilizing a Floating Storage and Regasification Unit, an operating LNG liquefaction facility and all of the associated logistics to deliver and utilize the natural gas. In the Atlantic region, NFE operates the only small-scale LNG terminal, which is resupplied by a chartered fleet of smaller LNG ships. NFE has performed over 100 small-scale ship-to-ship transfers and 100 small-scale ship-to-shore transfers in the Caribbean in the past 2 years, handling over 13MM MMBtu or 600,000 m³ of LNG during the time. All cargo transfers have been completed without incident or loss of product.



2.3.1.1 Gas Supplier

NFE has a secure portfolio supply of fuel, including from our liquefaction facilities, offtake from the world's largest suppliers, and ability to procure fuel as needed from the global market. NFE's offtake agreements allow NFE to source LNG from various locations including Trinidad or other locations as required. NFE also has the ability to purchase spot LNG cargo(s) as required.

NFE has provided a letter of reference from one of our LNG suppliers, Centrica, as Exhibit 30. The letter confirms that Centrica has the capacity to supply LNG in the quantities requested by NFE in connection with the MFH Facility.

2.3.1.2 Liquefied Natural Gas Ships & Major Equipment

NFE has charters for a number of ships that can deliver LNG to our micro fuel handling facility for fuel supply. This section outlines the arrangements we have for several of these ships, including three ships we have identified as most likely to deliver LNG to the MFH Facility in connection with delivery of

natural gas to San Juan Units 5 & 6. The Golar Arctic would act as a floating storage unit in the Caribbean Sea, while the Xin Le (to be renamed by NFE) would act as a semi permanently moored floating storage unit at Wharfs A and B. The Qi Yuan (to be renamed by NFE) would shuttle between the Golar Arctic and the Xin Le, together providing LNG to PREPA. NFE has included evidence of the charter agreements described below in Exhibit 31, with the understanding that these ships are representative of the size of ships that NFE would use to deliver the NFE pursuant to the fuel supply arrangement with PREPA. The specific vessels may be replaced with vessels of comparable size and class.

<u>Xin Le</u>

NFE has agreed terms for a charter with Anthony Veder for the Xin Le (to be renamed by NFE). Pursuant to its charter, NFE will be able to hire the Xin Le to deliver LNG in the Caribbean Sea and has the operational flexibility to use the ship to deliver LNG to Puerto Rico.

<u>Qi Yuan</u>

NFE has agreed terms for a charter with Anthony Veder for the Qi Yuan (to be renamed by NFE). Pursuant to its charter, NFE will be able to hire the Qi Yuan to deliver LNG in the Caribbean Sea and has the operational flexibility to use the ship to deliver LNG to Puerto Rico.

Golar Arctic

NFE has had a charter with Golar LNG Partners for the Golar Arctic since 2015 on a fixed term basis. The Golar Arctic can hold 140,648 m³ of LNG at 100% capacity. Pursuant to its charter and subsequent amendments, NFE is able to hire the Golar Arctic to serve as a floating storage unit in the Caribbean Sea. The Golar Arctic can be flexibly repositioned to shorten transit time to San Juan.

Golar Freeze

NFE has a 15-year charter with Golar LNG Partners for the Golar Freeze starting in December 2018. The Golar Freeze has a capacity of 125,000 m³ of LNG at 100% capacity. It is currently used as a multipurpose vessel, but pursuant to its charter, NFE will use the Golar Freeze as a fixed point natural gas supply point for Jamaica and a transshipment hub for its operations. NFE has the ability to use the Golar Freeze as a transshipment hub to deliver natural gas to Puerto Rico.

The combination of the Golar Arctic and the Golar Freeze gives NFE access to more than 260,000 m³ of available product for onward supply and distribution to San Juan. Coupled with other available and NFE controlled vessels, total capacity is 347,000 m³.

2.3.2 LNG Storage and Transfer

Supply Location:

LNG will be supplied from NFE's vessels that are strategically located within the safe anchorage of Portland Bight, Jamaica. This area was chosen for its safe and well protected anchorage and consistent metocean operating conditions. The vessels are anticipated to be located at NFE's operations in Portland Bight with the following position: 17 degrees 50.40 N, 77 degrees 06.64 W. The deep water afforded within the anchorage allows for replenishment cargoes to be delivered on large scale LNG carriers.

The above location currently undertakes one ship to ship transfer per week. With the LNG inventory on hand, two additional ship to ship operations will be conducted on a weekly basis to support demand in San Juan. These operations can be easily accommodated without supply disruption. The proximity of the supply location, just one and three quarters days of steaming one way, allows for NFE fleet optimization as it pertains to delivery schedules.

NFE has completed in excess of 100 ship to ship transfers of LNG supporting the above activities. All were completed safely, without incident and no pollution. Furthermore, there have been no missed cargo deliveries by NFE to its customers, allowing for 100% availability of LNG.

All of NFE's marine delivery coordination efforts are located within the supply area and allow for the following:

Strategic location for San Juan deliveries

- Close: One-way distance of 645 nautical miles, or 1.76 days steaming (one way)
- Efficient: Dovetails with existing LNG deliveries to other NFE locations which ensures an efficient and reliable supply chain

Marine operations and logistics already established

- NFE has experience with tonnage allocation
- Delivery scheduling is already underway for additional customers

Known environmental conditions

- 100 percent deliverability record for existing NFE supply chain
- Pin point weather forecasting service utilized

Consolidation of all ship to ship transfer activities

- Spare/replacement equipment readily available and on hand
- Equipment maintenance and testing
- Availability of third party suppliers and vendors

Supply Points

NFE has the option of using both the Golar Arctic and the Golar Freeze to allow for continuous deliveries to San Juan. The combination of both vessels gives access to more than 260,000 m³ of available product for onward supply and distribution to San Juan. Coupled with other available and NFE controlled vessels, total capacity is 347,000 m³.

In addition NFE is developing an onshore storage solution to provide additional storage and operational flexibility in the event that the energy and natural gas requirements of the San Juan Power Plant or PREPA generally grows. As you know, the process of siting, permitting, designing, and constructing a landed LNG storage facility can take a number of years.

Ship Name	Golar Freeze	Golar Artic	Coral Anthelia	Coral Energy	Xin Le	Qi Yuan	Total Storage
Purpose	Storage	Storage	Shuttle	Shuttle	PR	PR	
			vessel	vessel	Storage	Delivery	
Days of Supply to San Juan Units 5 & 6	42	48	2	5	10	9	116

Table 2-1 - NFE Shipping Assets

San Juan LNG Delivery

LNG will be delivered to the Xin Le through a ship to ship (STS) transfer operation. The expected frequency of the STS operation is 2 times per week. Each cargo delivered would be approximately 15,000 m³ to 28,000 m³ of LNG. The delivering vessels will transit into and out of the NFE terminal on a daylight basis only. The transit inbound and outbound will be conducted under the supervision and assistance from the San Juan Pilot Association. Both transits will be undertaken in such a way that any cruise ship movements have been completed prior to the supply vessels entering or departing the port of San Juan.

Each STS operation will be undertaken in accordance with NFE's STS manual including an addendum we have developed specifically for the San Juan harbor, the SIGTTO LNG ship to ship transfer guidelines, and any United States Coast Guard requirements or other applicable law.

The equipment utilized for each STS transfer is included in the design of the MFH Facility, since NFE already plans to perform STS transfers as part of its truck loading operations. The equipment is as follows:

- Trelleborg Pneumatic Fenders
- Emergency quick disconnect system
- Cryogenic LNG transfer hoses
- Ship to ship link

NFE shall not interfere with current operations for unloading and storing Bunker C fuel oil or diesel fuel at the existing PREPA San Juan Steam Plant generating facilities as requested on page 11 of the RFP. Upon PREPAs request, NFE is able to move the ship carrying LNG away from Wharfs A and B (into Wharf C or otherwise) and will work with PREPA to develop an operational plan for notice and movement of the ship and operation as PREPA's operations requires. While the work has been ongoing for NFE's micro fuel handling facility NFE has worked closely with PREPA in order to allow unloading and storing of fuel by PREPA and testing of water by PREPA. NFE is confident our operations can continue to work in tandem with PREPA.

2.3.3 LNG Vaporization Overview

The LNG pumps on the ship will transfer LNG to the shore at approximately 100 psig (7 barg) and -264 degrees F. The LNG will cross from the secured ship connection via two 8" cryogenic hoses. Two liquid hoses and one vapor hose will be provided. The cryogenic hoses will connect to a fixed piping cargo 8" stainless steel header that will lead to a manifold arrangement that continues on to four (4) truck loading bays and the two (2) LNG Vaporization Skids. A drain knock out drum will be placed underneath the LNG transfer header to allow for safe draining of the cargo hoses and header system.

Prior to reaching the two vaporization skids, the LNG will flow through a Vaporization Suction Drum to provide hold up time to allow for consistent flow to the vaporization unit. The Vaporization Suction Drum also provides enough hold up time for the San Juan Power Plant turbines 5 & 6 to perform a controlled operations transfer from natural gas to diesel in the event of a ship upset.

Vapor generated during the LNG transfer process and especially the initial cooldown will be sent to a common stainless-steel vapor header. This vapor will either be sent to a gas combustion unit or a boil-off gas compression system as described in later sections.

LNG flows to two parallel vaporization skids, each sized for 65 MMSCFD of vaporized LNG via a 6" stainless steel pipes off of the main LNG Transfer header downstream of the common Vaporization Suction Drum. All downstream equipment is provided in each skid.

LNG flows to one high head, vertical-can pump (per skid) rated to transfer LNG at a discharge pressure of approximately 655 psig. A spare pump will be installed for a 2 x 100% arrangement to accommodate an installed sparing philosophy. Typically, the vaporization skids will operate at turndown while only providing natural gas to San Juan Power Plant Turbines 5 & 6.

In a 1x100% arrangement, each skid will have a shell and tube vaporizer that will vaporize the LNG from liquid to vapor at an outlet temperature of 30 degrees F. The shell and tube vaporizer will be sized for a duty of 65 MMSCFD of vaporized gas. The heat medium could be a closed loop water/glycol system integrated with Units 5 & 6 nearby. The loop would use inlet air chilling on the turbines to heat the water/glycol loop to 55°F prior to the shell and tube vaporizer. A 100% back up gas-fired vaporizer sized for 65 MMSCFD of vaporized gas will also be installed in parallel to the shell and tube vaporizer. This heater will be able to accommodate the heating required if the turbines were not operating or providing the full required heating duty for vaporization and for start-up purposes.

The water/glycol loops will require circulation pumps per each vaporization skid. The water/glycol loop will be sized for 3,000 gpm to circulate to each turbine. The water/glycol pumps will be in a 3 x 50% arrangement. The 25 gpm makeup pump will be connected to a tote to supply additional water/glycol to the system as needed. Each vaporization skid's water/glycol loop will supply one specific turbine (either turbine 5 or 6) inlet air chilling package.

For startup purposes, a small ambient air vaporizer is placed downstream of the LNG send-out pumps. This ambient air vaporizer will vaporize a small slip-stream of LNG to be used as startup fuel for the gasfired vaporizer. The gas-fired vaporizer will operate via the ambient air vaporizer slip-stream until vaporized LNG into the pipeline can be used as a fuel source. There are a number of components for the vaporization systems, including a shell and tube vaporizer skid, backup gas-fired vaporizer, water circulation system, cryogenic pump system and ambient air vaporizer for start-up fuel purposes. Each is briefly described below

2.3.3.1 Vaporization Suction Drum

A Vaporization Suction Drum is utilized for resonance volume of LNG to ensure reliable operation of the San Juan Power Plant. The Vaporization Suction Drum is sized to allow for controlled operation and conversion of the turbines from natural gas to diesel without operational or safety trips in the event of an upstream ship upset.

2.3.3.2 Shell and Tube Vaporizer Skid

This is a U-Tube style shell and tube vaporizer sized for the 65 MMSCFD vaporization that comes with process piping and controls. The process and shell side are both 316/L stainless steel material to minimize corrosion due to the marine environment. The process bundle is designed and U-stamped per ASME Section VIII Div. I. Controls include equipment for monitoring NFPA59A required parameters for emergency / safety shutdowns. Each shell and tube vaporizer can provide significantly more than 50% of the required gas for San Juan Turbines 5 & 6.

2.3.3.3 Backup LNG Vaporizer

The backup gas-fired vaporizer is a water bath tank with a natural gas-fired indirect water heating system and natural convection 316/L stainless steel process bundle. The burner is designed per NFPA85 and IRI. The process bundle is designed and U-stamped per ASME Section VIII Div. I. Gas train comes with safety equipment monitoring pressures, proof of closures on valves, flame on light off, and proper operation of the heating system per NFPA85. The water heater system has dual 100% burners for 100% backup of water heating system. The back-up gas-fired vaporizers will be used if there are operational issues with the water loop or to supplement heating if required. Each shell and tube vaporizer skid is equipped with a Backup LNG Vaporizer.

2.3.3.4 Water Circulation System

The water circulation system comes with 3 x 50% water circulation pumps and a temperature control system to control the inlet temperature to the shell and tube vaporizer. The pumps are designed to run 1 on, 1 in backup and are monitored for flow rate and cavitation. This also allows for immediate operation in the event of a pump trip or failure. The water loop is only required for inlet air chilling purposes of the turbine to increase turbine capacity.

2.3.3.5 Cryogenic Pump System

The cryogenic pump system comes with dual 100% submerged, multi-stage cryogenic pumps that are enclosed in vacuum jacketed "sumps" which allows for immediate operation without time required for cooldown in the event of a trip or failure of the operating pump. Pumps are sized to provide approximately 550 psig differential pressure. Equipment is included to monitor and shutdown the equipment per NFPA59A as well as engineering best practice.

2.3.3.6 Ambient Air Startup Vaporizer

The ambient air vaporizer is used for initial startup of the Backup LNG vaporizer. Ambient air vaporizer is sized for the full burner requirement at 100% firing rate and can provide gas for 4-8 hours, or until system is self-sufficient.

2.3.3.7 Estimated Life

All equipment in the vaporization skids are designed for a 25-year life, assuming proper maintenance and inspections are followed. Some equipment, such as the ambient air vaporizers are expected to have a longer life cycle. Quarterly inspections are recommended on equipment.

2.3.3.8 Safety/Security Devices

Each system has its own set of safety devices. For the vaporization process, the parameters of the system are monitored per NFPA 59A, along with extra parameters that are included per engineering best practice. Also, pressure relieving devices, flame and gas detection, and automated shutdowns are incorporated per NFPA 59A. The backup LNG vaporization system has safety devices to protect against low water levels, low temperature levels, failures in the gas train components, and burner operation monitoring all per NFPA 85/IRI along with engineering best practices. The cryogenic pump system also incorporates parameter monitoring per NFPA 59A along with other monitoring equipment per engineering best practices. This allows for emergency shutdowns and warning devices to alert to potential issues, including flame detection, gas detection, and pump cavitation.

2.3.4 Natural Gas and Boil Off Gas

The natural gas will combine from each vaporization skid and flow through a custody metering skid to measure the flow that is sent to the San Juan Power Plant. A backup meter will also be installed at the San Juan Power Plant as requested in the RFP. The metering skid includes a gas chromatograph to determine the composition of the fuel gas. A pressure control valve station will regulate the pressure of the fuel gas to the combustion turbines.

Vapor generated throughout LNG transfer and/or LNG Truck loading can be sent to a boil-off gas (BOG) compression system. The BOG compressor will be able to compress the vapor to a pipeline pressure of 650 psig. Auxiliary equipment such as a discharge cooler and oil pumps will be supplied based on vendor recommendation and compressor design. The BOG system will be sized to accommodate scenarios such as boil off gas from initial cooldown processes, ship heat leak, and ship to ship transfer. The heat leak boil-off rate of the FSU barge is specified as 0.30% of the loaded volume/day.

The BOG will be sent to the fuel users at the facility when possible.

2.4 PROJECT EXECUTION PLAN

2.4.1 Resources and Project Execution Approach

Overall project execution will be provided by NFE including a San Juan based NFE project management team led by our Project Director, Jatila Ranasignhe, our Project Manager, Sam Abdalla and our Project Supervisor, Winnie Irizarry, each providing direct interfacing and coordination with PREPA. NFE will be supported by a combination partners that are globally recognized for their experience and expertise in LNG-to-Power Plant projects, as well as Puerto Rico-based contractors and consultants. Our overall project organization chart is provided below.



Our lead project engineers will be Black & Veatch; based in Overland Park, KS and with a subsidiary, Black and Veatch Puerto Rico, PSC, formed in Puerto Rico; and Moffatt & Nichol, based in Tampa, FL. Mitsubishi Hitachi Power Systems (MHPS) will be responsible for design, material procurement, installation, testing, and commissioning of all direct combustion turbine gas conversion scope.

Construction general contractor responsibilities and overall site construction management will be led by TSK and executed through self-performance or through selected local subcontractors according to project needs. We have also engaged with Lord Construction and Electric and other local Puerto Rico subcontractors in order to prepare to perform the work on a short timeline.

Procurement for critical, long-lead time equipment and components, including MHPS, will be led by NFE. Procurement for balance of plant components and field commodity materials will be the responsibility of NFE and will be led by TSK.

2.4.2 Contract Type

The project will be executed under firm lump sum engineering contracts with MHPS, Black & Veatch and Moffatt & Nichol as well as lump sum general contracting agreements with schedule and performance guarantees. Equipment will be procured under firm lump sum agreements with specific schedules negotiated and agreed in compliance with anticipated project timelines.

2.4.3 Project Management and Administration

2.4.3.1 Organization Chart and Key Personnel

The Project Organization Chart is included above. Key Personnel (including the Project Director, Project Manager, Project Supervisor, Engineering and Design Manager) and several of our key partners have been engaged in the development of this RFP response, the work underlying the proposal and this project execution plan. Upon award of this project by PREPA, the Key Personnel will assume project execution roles.

2.4.3.2 Quality

- Quality plans specific to the project will be developed based on NFE, Black & Veatch and Moffatt & Nichol standards, including the Quality Assurance plans as Exhibit 28.
- Engineering, procurement and inspection quality plans will follow Black & Veatch and Moffatt & Nichol Standards and Guides which are included as Exhibit 28.
- Construction quality plans will follow TSK's standards.

2.4.3.3 External Project Meetings and Client Interface

PREPA has advanced engineering and operational knowledge about the San Juan Power Plant and will be highly involved with the project execution from the start of project through the end of the warranty period. PREPA will be very involved with planning, monitoring, and root cause analysis of issues as they arise. We anticipate that PREPA may routinely send a representative of the members of their execution team to the engineer's office.

During the performance of the scope of work, NFE and PREPA will conduct meetings each month at a mutually convenient time and date for the purpose of reviewing the progress of the scope of work, the latest progress reports, the environmental plan, the safety plan, Quality Assurance Program, NFE's and subcontractors' adherence to the scope of work, and the project schedule as well as any other items either party would like to mutually discuss. NFE will prepare minutes of each such meeting, in form and content reasonably acceptable to PREPA, and will distribute to PREPA within five business days after such meeting.

A Monthly Progress Report summarizing the performance and status of all major aspects of the project will be issued to PREPA by NFE prior to the monthly status review meeting which will be reviewed during the status review meeting described above.

Weekly teleconferences with PREPA will be held that will include home office and field project team members for the purpose of reviewing any issues and action items that need to be discussed. NFE will maintain an Action Item list throughout the project.

NFE expects to engage PREPA and key partners and subcontractors in project execution planning workshops regularly throughout the project lifecycle. A Constructability Implementation Plan will be established to help ensure project collaboration and partnering objectives.

2.4.3.4 Partnering and Project Execution Planning Workshops

An organized partnering program will be utilized on the project. The program will facilitate close communication between all project stakeholders (Engineering and Construction project team members, PREPA, and key equipment suppliers and subcontractors). Scheduled meetings will be conducted at key junctures throughout the project life cycle. The meetings will be organized to help facilitate intra-organizational and inter-organizational communications via scheduled workshops that encourage team interaction and ownership of plans.

A preliminary project execution planning workshop schedule will be included as part of the Constructability Implementation Plan.

2.4.3.5 Project Initiation Plan

A summary of the major activities to be accomplished during project initiation are outlined below.

- The project staffing planned during the proposal stage will start on the project. Each of our key partners and subcontractors are ready to identify additional staffing as needed to support the project.
- PREPA, NFE and key partners on the project will participate in a Project Kickoff Meeting.
- Project team members will read and understand the contract documents relevant to their roles.
- NFE will develop a detailed three-month interim schedule (90-day look ahead) which will roll forward throughout the project. PREPA will input on the schedule and collaborate with NFE to accelerate the schedule as possible.
- NFE and key partners will update the Project Execution Plan based on the Project Kick-Off Meeting, feedback during monthly status meetings, or from additional feedback from PREPA.
- NFE will set up Constructability Implementation Plan for the MFH Facility and the conversion work on San Juan Units 5 & 6.
- NFE and its key partners will prepare the Project Design Manual.
- NFE will initiate additional Project Cost Report and Project Schedule development (as outlined below).
- NFE and its key partners and subcontractors will develop Procurement Matrix including Subcontractors and Procurement Status Report.
- NFE will take responsibility for developing the Engineering Deliverables List with Black & Veatch and Mitsubishi.

- NFE will work with PREPA to establish Project Reporting Requirements.
- NFE and all key partners and subcontractors will review and update Division of Responsibility.
- NFE will establish Action Item List.
- NFE will work with PREPA to establish monthly meeting dates with PREPA.

2.4.4 Project Controls, Accounting, and Financial

NFE will take responsibility for Project Controls, Accounting, and Financial functions related to the MFH Facility and the conversion work for San Juan Units 5 & 6. NFE will designate individuals on its or its key partners team to review and manage all project controls both from a project management standpoint from such individual's home office, and at the project site itself. The project manager responsible for field project controls will be expected to make frequent trips to the project site.

2.4.4.1 Schedule and Schedule Control

The Project Schedules will utilize the Critical Path Method (CPM) technique of scheduling. The specific software will be Primavera Project Planner (P6), converted to a format readable by PREPA's project team if needed at PREPA's request. The Project Schedule will be developed by an integrated interdisciplinary team and will be completely integrated through logical ties between all phases of the Project.

- Level 1 Project Management Plan (updated version due two weeks after Limited Notice to Proceed)
- Level 2 Schedule (due two weeks after Limited Notice to Proceed)
- Level 3 Detailed CPM Schedule (due three months after Limited Notice to Proceed)
- Three Week Look -Ahead Schedule (due weekly during Construction)

The Project Schedules will be updated each month. Schedule variance analysis will be included in the monthly progress reports. Float Analysis reports will be prepared by the project planner and a float review conducted with the project team.

The Level 3 Schedule will incorporate planned float on key schedule pathways. The purpose for this planned float is to manage schedule risk at key intervals without affecting downstream successor planned start dates. Schedule progress will be measured against the baseline planned dates from the Level 1 Project Management Plan.

2.4.4.2 Project Initiation 90-Day Look-Ahead Plan

A 90-day look-ahead schedule shall be prepared and issued to the Project Management Team within one week of the project planning kickoff meeting.

The 90-day look-ahead schedule will show:

- Time frames for the early planning of long-lead delivery items.
- Early engineering and design scope to be performed.

Implementation of the various project control tools, including, for example and as agreed with PREPA, the Management Control Schedule (Level 3 CPM Schedule), Engineering Deliverables List (EDL), Procurement Status Report (PSR), an agreed Project Dashboard and/or Action Items List.

2.4.4.3 Cost and Cost Control

NFE does not anticipate a change in capacity payment based on budget. In NFE's experience, implementing controls to stay on budget goes hand in hand with implementing controls to stay on time. Because time is of the essence to PREPA, we outline below our cost control mechanisms. These will serve as a foundation to ensure an on time and on budget implementation of the project.

A definitive, detailed estimate will be prepared based on the RFP and supporting documents provided by NFE. As documented in this proposal and various exhibits hereto, NFE has engaged several subcontractors for work related to the MFH Facility and has received a not-to-exceed price from Mitsubishi. These actions give the price of the conversion work a solid ceiling and lend financial stability to an already stable partner and project.

The definitive detailed estimate will be aligned with the Project Procurement Matrix that identifies how we intend to buyout and build the Project. The definitive estimate will serve as the basis for the project cost control tools and the resource-loaded Project Schedule.

Engineering will regularly update design quantities to quantify the design and anticipated forecast. Updates will be conducted as design progresses and at completion on a system and deliverables basis. The intent of this effort is to identify early trends or deviations from budget (plus or minus) that can be mitigated or accounted for in downstream planning and cost forecasting activities. The quantities to be reported include at a minimum:

- Concrete
- Structural Steel to the ton
- Electrical / Instrumentation Wire & Cable including subcontractor or vendor supplied
- Wire and Cable Terminations including subcontractor or vendor supplied
- Above Ground Pipe Hangers (large bore)
- Above Ground Pipe (large bore and small bore, including vendor supplied)
- Above Ground Conduit
- Insulation and Lagging

In addition to the quantities noted above, the following items will be tracked for progress status:

- Combustion Turbine Modifications Percent Complete by Unit
- Combustion Turbine Filter House and Ductwork by Unit (Tons)
- Start-Up Packages Construction Turnovers

- Start-Up Packages Turnover to PREPA
- Start-Up Loop Checks

The engineering and procurement cost control tool will be the Earned Value Management Report, which will be updated based on earned values from the Project Schedule and actual hours from the accounting system.

A project Dashboard Report and/or the Action Item List will be updated to facilitate internal reviews at least monthly.

2.4.4.4 Project Reporting

A Monthly Progress Report summarizing the performance and status of all major aspects of the Project will be issued to PREPA.

The following is a typical summary of information that will be included in the Report:

- 1.0 Executive Summary
- 2.0 Environmental, Safety, Health, & Security
- 3.0 Key Performance Indicators
- 4.0 Engineering and Design Status
- 5.0 Equipment & Material Status
- 6.0 Construction Status
- 7.0 Commissioning Status
- 8.0 Contract Change Order Status
- 9.0 Photos

All other project reporting will be in accordance with NFE standards.

2.4.5 Engineering Execution

The plant will be designed in accordance with the requirements included in the engineering and construction agreements. Required codes and standards are U.S. Standards.

The following preliminary control drawings are being or have already been developed based on currently available information. They will be finalized with further information and feedback from PREPA:

- Site Arrangements
- Plant Arrangements
- Process Flow Diagrams
- Electrical Single Line Diagrams
- Control Systems Architecture Diagrams

2.4.5.1 Engineering Staff

NFE will coordinate all engineering staff, including lead engineers from Black & Veatch and Mitsubishi as well as subcontracting specialized engineering where appropriate according to the current division of responsibility (i.e., steel detailing, HVAC, fire protection, cathodic protection, etc).

Field engineers will be required to support construction and may be provided from Black & Veatch or TSK as appropriate for the project needs, or from other key partners or local partners.

2.4.5.2 Engineering Design Basis and Tools

The design team has developed the preliminary control drawings which will be used as a basis for the project along with any feedback from PREPA. Base scope project design will be in 3D Plant Vision. Each key partner will use their own tools for calculations and analysis and NFE will coordinate information between and among key partners. Drawings will be processed using J05 and J07.

2.4.5.2.1 Civil/Structural Engineering

NFE's key partners will prepare the following design civil/structural documents and construction drawings:

- Plot Plan
- Site Arrangement Drawing
- Underground Utility Drawings
- Site Grade and Drainage Drawings
- Site Roadways Drawing
- Foundation Drawings
- Steel Drawings
- Erosion and Sedimentation Plan
- Architectural Drawings
- Procurement Specifications
- Construction Specifications
- Calculations

Structural steel design for the buildings and the utility racks will be performed by the structural engineers.

2.4.5.2.2 Mechanical/Chemical Engineering

NFE's key partners will prepare the following mechanical/chemical design documents and construction drawings:

General Arrangement Drawings

- Piping and Instrumentation Diagrams
- Piping Isometric Drawings
- Equipment List
- Valve List
- Lubrication List (Developed by Site Engineering)
- Pipeline List
- Mechanical Device List
- Hanger List
- Pipe Support Details (Typical Supports)
- HVAC Drawings
- Fire Protection Drawings
- Cathodic Protection Drawings
- Hazardous Area Classification Drawings
- System Description
- Hazardous Area Classification Drawings
- System Descriptions
- Procurement Specifications
- Construction Specifications
- Calculations

System design and equipment sizing calculations will be performed by the mechanical team.

HVAC design and details will be developed by the HVAC team, if necessary for the project. Fire Protection design and details will be developed by NFE's fire protection partners. Cathodic Protection will be developed by Black & Veatch for the balance of plant work in conjunction with Mitsubishi and PREPA.

Piping isometrics for all high energy piping including small bore (\geq 350° F) piping will be developed. In addition, design of pipe hangers for all high energy systems will be completed by engineering. Piping isometrics for cold systems will be developed for all piping 2 ½" and larger and pipe supports will be designed by engineering. Cold piping 2" and smaller will be routed by engineering and pipe supports will be determined by construction utilizing standard pipe support details. Pipe spool sheets for all pipes will be provided by the piping fabricator based on the Pipeline List and Piping Isometric Drawings. Pipe support details for all engineered pipe supports will be provided by the pipe support supplier based on the Hanger List.

Engineering will develop a water mass balance for the project. Engineering will develop a chemical cleaning procedure to be used by construction and startup to facilitate cleaning of the HRSGs.

Engineering will develop a fuel gas pneumatic blow procedure for use by construction and startup to clean the natural gas piping.

2.4.5.2.3 Electrical Engineering

NFE's key partners and local partners will prepare the following electrical design documents and construction drawings:

- One-Line Diagrams
- Schematics and Wiring Diagrams
- Lighting Drawings
- Grounding Drawings
- Lightning Protection Drawings (as required)
- Cable Tray Drawings
- Circuit List
- Raceway List
- Electrical Load List
- Switchgear and Motor Control Center List
- System Descriptions
- Procurement Specifications
- Construction Specifications
- Calculations
- Fault Current Study

In addition, construction power design will be provided by the electrical engineers.

2.4.5.2.4 Instrumentation and Controls Engineering

Black & Veatch will prepare the following controls design documents and construction drawings:

- Control Logic Diagrams
- Control System Architecture
- Instrument List
- Instrument Installation Details
- System Descriptions
- Procurement Specifications

- Construction Specifications
- Calculations
- Graphics Sketches

2.4.5.3 Engineering QA/QC

Engineering will follow the Black & Veatch QA/QC requirements for the project. This will include control of documents and data, checking and verification requirements, any validations required, and control of design and scope changes.

2.4.5.4 Project Manuals

Black & Veatch will develop a set of manuals that will be used to control the work on the project. These will include a Project Instruction Manual (PIM) and Project Design Manual (PDM). The Project Procurement Manual (PPM) will be included as a part of the PIM. The PIM will provide a documented plan for managing the project. The PDM will establish the design basis for the project. The PPM covers the procurement plan for the project and the scope of the individual procurements.

2.4.5.5 Engineering Completion

We anticipate a required submittal of the following engineering summary documentation to PREPA.

Drawings updated and conformed to "as built" construction records:

- Plot Plan
- Site Arrangement
- General Arrangements
- P&IDs
- Underground Utilities
- Schematics
- One-Line Diagrams
- DCS Architecture Diagram
- Operation and Maintenance Manuals for all Equipment
- Final (updated) electronic copy of all Lists

2.4.6 Fuel Supply Area Execution Plan

The following major facilities would be constructed by NFE in anticipation of the conversion of San Juan Units 5 & 6:

- Marine Works: Mooring, Fendering, Berth & Structure, Maneuvering
- LNG Vaporization, including San Juan Units 5 & 6 integration as well as other required equipment, such as pumps
- Natural Gas Metering

- LNG Impoundments
- Emergency vents
- Plant air systems.
- Fire protection systems.
- Distributed control system
- Electrical equipment enclosures
- Lighting updates and improvements
- Security and fencing updates and improvements
- Roads and pave ways as needed within the MFH Facility
- Storm water drainage updates as needed
- Site demolition as needed (already complete)
- Septic & Sewer System updates as needed

There are several engineering, vendor, and construction contractors involved in the project execution of the MFH Facility and can be seen in the graphic below.

A specific equipment division of responsibility table is provided in Exhibit 19. In general, Moffatt & Nichol is providing engineering and support for all marine, civil, and electrical distribution activities. Berth repairs are required as well as demolition of existing warehouses on Wharfs A & B. Black & Veatch is providing process and controls engineering and support for the MFH in coordination with NFE's chosen vendors. NFE is purchasing all major process equipment from selected vendors with a general contractor providing the remaining procurement items. Moffatt & Nichol, Black & Veatch, and equipment vendors will support construction, start-up, and commissioning activities.



2.4.7 San Juan Power Plant Area Execution Plan

There are two distinct parts to the San Juan Power Plant conversion; (i) combustion turbine modifications and (ii) new balance-of-plant systems. All combustion turbine modifications will be designed, supplied, installed, and commissioned by Mitsubishi. Balance-of-plant systems will be designed by Black & Veatch with components supplied, installed, and commissioned by TSK with Black & Veatch support.

As described above, TSK will be NFE's single general contractor for the installation and commissioning work for both the MFH Facility and the conversion of the San Juan Power Plant.

NFE will oversee and manage the conversion work with appropriate subcontractors and will procure all equipment from suppliers, including the combustion turbine original equipment supplier company, Mitsubishi, for San Juan Units 5 & 6. Mitsubishi shall be responsible for the startup and commissioning of equipment provided and installed inside the gas turbine enclosure as part of the dual fuel conversion and the restart of the combustion turbines, inclusive of combustor tuning. Mitsubishi will coordinate with PREPA for the outage plans as shown in the Mitsubishi schedule in Exhibit 25.

NFE will continue to cooperate with plant management and coordinate with PREPA to ensure impacts are lessened during the project execution. Pipe routing within the San Juan Power Plant is determined

and will minimize impacts on the current operations of the facility due to faster construction and minimal impacts to existing structures.

There are few interface points between the MFH facility and the San Juan Power Plant, including only 5 piping connections and specific safety and operational instrument signals to be communicated through the process control logic system. Any required MFH facility construction and commissioning that affects the PREPA power plant will take place at a time when similar activities are underway at the San Juan Power Plant in order to minimize any impacts.

The division of responsibility for this scope of work is as follows.

FUEL OIL SYSTEM	NFE / Others	MHPS- AMER	Notes
Demo of existing system or individual Components			
*MHPS-AMERA - TGE and all internal components		х	
*Other - Components external to TGE	X (scope definition)		
Design of interconnect piping from fuel oil HP pump skid to metering skid		х	
Supply of interconnect piping from fuel oil HP pump skid to metering skid		х	
Installation of interconnect piping from fuel oil HP pump skid to metering skid		х	
Fuel Oil Metering Skid (Design/supply/install)		х	
Foundation / anchoring / site / civil needs for skid		Х	1
Provide common skid connection points for power and ground		х	
Design power and grounding to skid	х		
Supply & install power and grounding to skid	Х		
Design and supply of Instrument air		х	
Cable, conduit / cable tray from skid to control cabinet		Х	
Loop checks		х	7
Design of vents and drain connections		Х	
Supply and installation of vents and drain		Х	
Layout of control oil system piping from control oil skid to Fuel Oil Metering Skid		х	2
Design, Supply, Installation of hydraulic lines from con- trol oil skid to Fuel Oil Metering Skid		х	3
Design of interconnect piping from fuel oil metering skid to distribution manifold (Primary + Secondary)		х	
Supply of interconnect piping from fuel oil metering skid to distribution manifold (Primary + Secondary)		х	
Installation of interconnect piping from fuel oil metering skid to distribution manifold (Primary + Secondary)		х	
Design of GT Manifolds / Pigtails to fuel nozzles + supports		Х	

FUEL OIL SYSTEM	NFE / Others	MHPS- AMER	Notes
Supply of GT Manifolds / Pigtails to fuel nozzles + supports		Х	
Installation of GT Manifolds / Pigtails to fuel nozzles + sup- ports		x	
Duplex Oil Nozzles (at GT combustors)		х	
Fuel Oil PCV (Supply)		х	
Demo Existing		Х	
Cap Instrument Air lines		х	
Modify existing piping and supports for new PCV		Х	3
Layout of control oil system piping		Х	3
Supply & installation of hydraulic lines and supports		х	
Design cable, conduit / cable tray from skid to control cabinet		x	
Supply & install cable, conduit / cable tray from skid to control cabinet		x	
Loop checks		х	7,9

FUEL GAS SYSTEM	NFE / Others	MHPS- AMER	Notes
Fuel gas filter separator (Design/supply)	х		
Install filter separator	х		
Design filter separator foundation	Х		
Supply and install filter separator foundation	х		
Design grounding to filter separator	Х		
Supply & install grounding to filter separator	х		
Design cable, conduit /cable tray from filter separator to control cabinet	х		
Supply & install cable, conduit /cable tray from filter sepa- rator to control cabinet	x		
Loop checks	Х	х	3
Fuel gas metering Skid (Design/supply/install)		х	
Mezzanine level platform design (above oil skid - Tur- bine left)		х	
Supply and installation of mezzanine level platform (above oil skid - Turbine left)		х	
Design piping from fuel conditioning skid to fuel gas me- tering skid		х	3

FUEL GAS SYSTEM	NFE / Others	MHPS- AMER	Notes
Supply piping from fuel conditioning skid to fuel gas me- tering skid		х	3
Install piping from fuel conditioning skid to fuel gas me- tering skid		х	3
Coriolis Meter, FG (Design/supply)		х	
Design valves and piping for Coriolis meter isolation/bypass	Х		
Supply & install valves and Piping for Coriolis meter isola- tion/bypass	х		
Design connecting piping and supports for Coriolis meter	Х		
Supply & install connecting piping and supports for Coriolis meter	х		
FG Manifold / Pigtails (Design / Supply)			
Design of FG Manifold / Pigtails to fuel nozzles + supports		Х	
Supply of FG Manifold / Pigtails to fuel nozzles + supports		Х	
Installation of FG Manifold / Pigtails to fuel nozzles + supports		x	
Design piping from metering skid to ring (distribution) manifolds		х	
Supply piping from metering skid to ring (distribution) manifolds		х	
Installation of piping from metering skid to ring (distri- bution) manifolds		х	
Cable, conduit / cable tray from skid to control cabinet		х	3
Loop checks		х	7
Design, Supply, Installation of Instrument air supply		х	3
Design, Supply, Installation of Vents to ATM		х	3
Design, Supply, Installation of Drains / oil water / turbine drains		х	
Provide common skid connection points for power and ground		х	
Design power and grounding to skid	Х		
Supply & install power and grounding to skid	Х		
Layout of control oil system piping		х	

CONTROL OIL SYSTEM	NFE / Others	MHPS- AMER	Notes
Hydraulic Control Oil Pump Skid (Design/Supply)		х	
Design foundation and anchoring	х		
Supply and install foundation and anchoring		х	Use existing
Provide common skid connection points for power and grounding (Desing)		х	
Design power and grounding to skid	Х		
Supply & install power and grounding to skid	Х		
Design cable, conduit / cable tray to and from skid to control cabinet		х	
Supply & install cable, conduit / cable tray to and from skid to control cabinet		х	
Loop checks	Х	Х	7
Design drains and vents			
Supply and install drains and vents	Х		
Layout of control oil system piping		Х	
Supply & install control oil system piping		х	
Design, Supply, Installation of Control Oil connections from Control Oil (HPU) Pump Skid to Hydraulic systems of the following:		х	
Fuel Gas Metering Skid		Х	
Fuel Oil Metering Skid		х	
Fuel Oil PCV		х	
Steam Injection FCV		Х	
IGV Actuator		Х	
Accumulators		Х	
Accumulators installations		Х	

SWEEP AIR SYSTEM	NFE / Others	MHPS- AMER	Notes
Sweep Air System Design (Partially located on Gas skid - Partially shipped loose)		х	
Modifications to GT Manway / compressor combus- tor wrapper (design/supply/install)		x	
Piping from GT take off to Fuel Gas skid (de- sign/supply/install)		х	
Piping from Fuel Gas system to Primary and Secondary fuel oil manifolds (design/supply/install)		х	

SWEEP AIR SYSTEM	NFE / Others	MHPS- AMER	Notes
Valve Mounting and Supports (design/supply/install)		х	
Instrument Air (design/supply/install)		Х	
Cable, conduit / cable tray from Gas skid to control cabi- net (design/supply/install)		х	
Loop checks		Х	7

PURGE AIR SYSTEM	NFE / Others	MHPS- AMER	Notes
Purge Air System (Design/supply/install)		Х	
Valve supply		Х	
Valve Mounting and Supports (design/supply/install)		Х	
Design, supply, installation of interconnection piping & sup- ports to Fuel Gas Metering and Fuel Oil Metering		x	
Cable, conduit / cable tray from skid to control cabinet		Х	
Loop checks		Х	7
Drain connections / Turbine Drains (design/supply/install)		X X	
Vents to ATM (design/supply/install)		х	
Instrument air (design/supply/install)		х	3

OTHER ITEMS	NFE / Others	MHPS- AMER	Notes
Steam Injection Throttle Valve (Design/supply/install)		Х	
Hydraulic Connections		Х	
Piping Modifications (design/supply/install as needed)		х	
Cable, conduit / cable tray from skid to control cabinet		Х	
Loop checks		х	7
Insulation		Х	
IGV Actuator (Design/supply/install)		Х	
Demo Existing		Х	
Cap Instrument Air lines		Х	
Install mounting bracket / IGV / Turnbuckle & me- chanical		x	
Layout of control oil system piping		Х	3
Supply & installation of hydraulic lines and supports		х	
Cable, conduit / cable tray from skid to control cabinet		х	
Loop checks		Х	7
GT Control system expansion (design/supply/install)		х	

OTHER ITEMS	NFE / Others	MHPS- AMER	Notes
HRSG/STG/BOP Control System Evaluation - logic, graphics, upgrades (design/supply/install)	х		
Fuel gas heating (to meet minimum absolute or dew point requirements, not GT heat rate improvement heating)	х		3
Fuel gas compression (not required)			
Fuel gas conditioning (design)	Х		
Fuel gas conditioning (supply and install)	Х		
Identification of electrical supplies for new equipment	х		4
GT Enclosure Mod's (design/supply/install)			
GT Enclosure Modifications for Skid Access (de- sign/supply/install)		х	3
GT Enclosure Ventilation (Evaluate/modify and upgrade as needed)		x	
GT Enclosure Hazardous Gas Detection (Evaluate/modify and upgrade as needed)		x	
GT Enclosure Fire Protection (Evaluate/modify and upgrade as needed)		х	
Hazardous Classification Review around new components (outside Enclosure) and any required modifications	х		6
Hazardous Classification Review around new components (inside Enclosure) and any required modifications		х	
Instrument air vessel in enclosure		х	

OTHER ITEMS	NFE / Others	MHPS- AMER	Notes
Upgraded ignitors / transformers (design/supply/install)		Х	
Design cable, conduit / cable tray from skids to con- trol cabinet		х	
Supply & install cable, conduit / cable tray from skids to control cabinet		х	
CTG performance testing – natural gas and fuel oil (development of test procedure, supply/install test instrumentation, test execution, test calculations/ report)		х	
CTG emissions testing – natural gas and fuel oil (de- velopment of test procedure, supply/install test in- strumentation, test execution, test calculations/ re- port)		х	

OTHER ITEMS	NFE / Others	MHPS- AMER	Notes
Ignitor leak air manifold		х	
Piping Modifications Outside GT Enclosure (design, sup- ply, install as needed)	х		8
Piping Modifications Inside GT Enclosure (design, sup- ply, install as needed)		х	8
Hydro / X-ray / other	Х	х	8
Insulation	Х	х	8
CTG fuel gas operation and maintenance training		х	

2.5 ASSURANCES OF PROJECT APPROACH & METHODOLOGY

2.5.1 Environmental

NFE has had an Environmental Assessment approved for the development, construction and operation of its micro fuel handling facility in San Juan. If awarded the contract for conversion of and fuel supply to San Juan Units 5 & 6, NFE would modify the existing Environmental Assessment document. Because this project would reduce emissions from Units 5 & 6, this modification would be non-substantial in nature. Prior to beginning the demolition of Warehouses A & B on the project location site, NFE successfully permitted and performed the work for the abatement of asbestos and lead that were contained at the site. If necessary, NFE would similarly obtain any necessary permits to perform abatement work as needed for the completion of the project proposed herein. During this project, NFE will continue to meet all requirements as outlined in Section 4.1 Permitting Path and Matrix.

During operations, there are no adverse chemicals or materials used in the process that have negative impacts to the environment. The gas fired vaporizers contain an exhaust that is designed for <= 9PPM NOx emissions to meet codes, regulations, and best practices.

At NFE, we believe that all employees and stakeholders are entitled to the same level of protection regardless of where in the world they work. To ensure a consistent approach to safeguarding Health, Safety, Environment and Security we have developed a global HSE Management System supported by our HSE processes, procedures, instructions and guidelines, as well as a mature security system. See Exhibit 29, which contains NFE's "Health, Safety, Security & Environmental Manual". NFE will develop and employ a similar manual and procedures for its operations in San Juan. Safety is one of our core values, and we believe that by working together with integrity, we will create an incident-free NFE workplace every day, everywhere.

2.5.2 Safety & Quality Assurance

NFE's operations have not incurred a lost time incident. NFE's approach to Safety & Quality Assurance have allowed for a safe working environment during all phases of project execution. NFE works with reputable companies, which also value and execute safe design and operations practices.

NFE and NFE's proposed engineer's Quality Assurance plans are attached as Exhibit 28.

2.5.3 Proven Approach & Organizational Structure

If selected, NFE has the ability to respond with sufficient key and line staff in addition to the proposed key individuals in this Section 2. NFE will be organized to effectively deploy support for PREPA.

NFE has proven the effectiveness of our organizational approach through the successful completion and operation of similar projects in Jamaica and Barbados, which have been described in previous sections of this proposal. Please refer to Section 1.2.1 for more detailed information regarding the projects that have been executed, demonstrating the successful approach and methodology employed by NFE.

2.6 LIST OF EXHIBITS

The following exhibits are included in the appendix.

- 19. MFH Division of Responsibility
- 20. Power Plant Division of Responsibility
- 21. MFH Process Flow Diagram
- 22. Power Plant P&IDs (P199399-CTGP-M2626 / P199399-CFGA-M2381)
- 23. Basic Engineering Design Data
- 24. Marine, Civil, and Electrical Design
- 25. Mitsubishi Schedule
- 26. Mitsubishi Letter Confirming Subcontracting for Natural Gas Conversion and Responding to Inquiries Regarding LPG Conversion
- 27. Ship to Ship Manual
- 28. Quality Assurance Plans
 - a. Black & Veatch Quality Plan
 - b. Moffatt & Nichol Quality Plan
 - c. TSK Quality Plan
- 29. Health, Safety, Security and Environmental Manual
- 30. Gas Supply Confirmation Exhibits
 - a. Centrica Letter confirming Gas Supply
 - b. Centrica Corporate Snapshot
- 31. Ship Confirmation

- a. Letter from Anthony Veder confirming arrangements for ships
- b. Evidence of Charter Agreement for Golar Freeze
- c. Evidence of Charter Agreement for Golar Arctic



SECTION 3.0

Price Proposal



3.0 Price Proposal

3.1 PRICE PROPOSAL

Price Proposal Component #1:

Fixed Annual Capacity Payment (for initial 5-year base): \$10mm per year.

Price Proposal Component #2:

Annual Consumption Rate: 25 TBTU as per the RFP.

Unit Cost \$/MMBtu: \$7.10/MMBtu Unit Cost for the initial 5-year period on average.

Year 1 Unit Cost: \$8.50/MMBtu. Year 2 Unit Cost: \$7.50/MMBtu. Year 3 to 5 Unit Cost: \$6.50/MMBtu.

The Unit Cost is incremental to the Price Proposal Component #3.

Price Proposal Component #3:

Applicable Index for Unit Fuel Cost: Henry Hub multiplied by 115%. The specified price for Henry Hub is published under the heading Monthly Bidweek Spot Gas Prices (\$/MMBtu): Louisiana/Southeast: Henry Hub in the issue of Platts's Inside FERC's Gas Markets Report.

Price Proposal Component #4:

Please see Exhibit 32 for our draft of PREPA's proposed contracts.

The terminal can be a catalyst to develop additional generation projects. As such, NFE is willing to work in coordination with PREPA and PREC to establish a volumetric discount to incentivize further natural gas generation development in the Northern part of the Island.

3.2 TERMS AND CONDITIONS

We have reviewed the contracts that PREPA provided for the fuel supply and the conversion work. We are confident that NFE and PRPEA can reach an agreement on terms that are acceptable to both parties. Please refer to our draft of PREPA's proposed contract for fuel supply and the conversion work on Units 5 & 6 attached as Exhibit 32.

3.3 LIST OF EXHIBITS

The following exhibits are included in the appendix.

32. NFE Draft of Terms and Conditions Proposed by PREPA

¹ Assumes agreed on payment terms including being current over previous year.



SECTION 4.0

Progress & Path Forward



4.0 Progress & Path Forward

4.1 PERMITTING PATH AND MATRIX

NFEnergía LLC (referred to in this section as "NFE") has already made substantial progress on the permitting for our micro fuel handing facility in the Puerto Nuevo section of the Port of San Juan. NFE has already obtained several of the permissions for the facility, many of which overlap with the requirements of this project, and is well along the in the authorization process to obtain the remaining permissions.

NFE has obtained a Strategic Project designation from the Puerto Rico Planning Board for the micro fuel handling facility. This designation means that permitting for development of NFE's micro fuel handling facility project as well as the additional work necessary on Wharfs A and B to deliver natural gas to PREPA Units 5 & 6 would go through the Puerto Rico Permit Management Office ("OGPe") in an expedited fashion, which allows NFE to have a single point of contact for its permitting needs in Puerto Rico. This streamlines the permitting process with respect to our development.

This section outlines NFE's anticipated permitting path for both NFE and PREPA through a permitting matrix for each area of the construction and operation of the project. Each line of the matrix shows the activity that must be permitted, the applicable permit, the current status, and the plan for the path forward.

#	PROCESS STEP	COMPLETED ON	NOTES
1	Letter of Intent (LOI)	December 12, 2017	LOI for development of a Micro Fuel Handling Facility submitted to US Coast Guard Sector San Juan ("USCG")
2	Preliminary Waterway Suitability Assessment (PWSA)	December 12, 2017	PWSA submitted to USCG Sector San Juan for Micro Fuel Handling Facility
3	Area Maritime Security Commission	February 22, 2018	Presented to AMSC regarding plans to bring LNG into San Juan Harbor via Micro Fuel Handling Facility
4	Water Suitability Assessment Risk Workshop	March 20-21, 2018	Workshop with USCG and Stakeholders conducted in San Juan (including PREPA)
5	Navigation Simulation	May 3, 2018	Navigation Simulation conducted with San Juan Pilots at Resolve Maritime Academy
6	Follow-On Waterway Suitability Assessment (FWSA)	May 22, 2018	FWSA submitted to USCG Sector San Juan for Micro Fuel Handling Facility
7	Operational Risk Assessment Workshop	May 23-24, 2018	Workshop with USCG and Stakeholders conducted in San Juan

Table 4-1 - NFE Steps Completed Toward Issuance of United States Coast Guard Letter of Recommendation

#	PROCESS STEP	COMPLETED ON	NOTES
8	USCG Visit to NFE Facilities & Operations Observation	July 11 & 21, 2018	USCG visit to Montego Bay and Kingston, Jamaica to observe Ship-to-Ship & Ship-to-Shore transfers
9	Letter of Recommendation (LOR)	Expected September 2018	Draft LOR has been completed by USCG Sector San Juan

Table 4-2 - NFE Permits Related to Liquified Natural Gas Delivery (Marine)

#	ACTIVITY	PERMIT	STATUS	PLAN
1	Ship to ship transfers and movement of a storage vessel	U.S. Customs and Border Protection Jones Act approval	NFE has obtained a letter from U.S. Customs and Border Protection approving the delivery of LNG to the storage vessel.	NFE plans to design its operations in compliance with its Jones Act approval.
2	Crew on storage vessel to stay with vessel for up to 180 days	U.S. Customs and Border Protection approval	NFE has obtained an approval from U.S. Customs and Border Protection.	NFE plans to design its operations in compliance with this approval.
3	Import natural gas on vessels from various sources	U.S. Department of Energy approval	Complete	NFE will import LNG in accordance with the terms of the approval.
4	Importation, distribution, delivery, and supply of natural gas in Puerto Rico	Department of Transportation and Public Works ("DTOP") Natural Gas Company Authorization	Application submitted.	Respond to agency comments and modify as necessary if PREPA awards NFE the conversion work.

Table 4-3 - NFE Permits Related to Construction on the Wharf (Outside the PREPA Site for San Juan Units 5 & 6)

#	ACTIVITY	PERMIT	STATUS	PLAN
1	Discharges of stormwater during construction on Wharfs A and B	National Pollutant Discharge Elimination System ("NPDES")	NFE is drafting a notice of intent for the construction.	NFE will submit the complete notice of intent in advance of the construction.
2	Archeology Division from the Instituto de Cultura Puertoriqueña	Historic Preservation Consultation Phase 1A and 1B archeological study.	Complete.	N/A
3	Construction and operation of micro fuel handing facility	Environmental Assessment	Complete.	N/A
4	Additional construction and operation of	Modify Environmental Assessment.	Coordinating with OGPe.	Work with OGPe to determine best route for modification if

#	ACTIVITY	PERMIT	STATUS	PLAN
	equipment related to delivery of natural gas to San Juan Units 5 & 6			PREPA awards NFE the conversion work.
6	Demolition of warehouses on the wharf	Lead-based Paint Removal Permit	Complete.	N/A
7	Demolition of warehouses on the wharf	Asbestos Removal Permits	Complete.	N/A
8	Demolition of warehouses on the wharf	Demolition Permit	Complete.	N/A
9	Construction of air emissions sources	Puerto Rico Environmental Quality Board Air Permit	Pending receipt of OGPe Construction Permit.	To be submitted immediately upon receiving Construction Permit, as applicable to construction.
10	Connections to water, telephone and electricity utilities	Infrastructure endorsements	NFE submitted its infrastructure endorsements.	To be incorporated into construction permit.
11	Construction of micro fuel handling facility	OGPe Construction Permit	NFE is currently drafting construction designs/plans.	Expected to file next week.
12	Authorization of erosion and sediment control measures, fugitive emissions, and waste disposal during construction	Consolidated General Permit	NFE is currently drafting plans for erosion and sediment control, fugitive emissions mitigation, and waste disposal for construction.	Expected to file next week.
13	Operation of air emissions sources	Puerto Rico Environmental Quality Board Air Permit	Pending installation of equipment that will result in air emissions.	To be submitted immediately upon installation of equipment that will result in air emissions.
14	Authorization of industrial operations	Use Permit	Pending completion of construction.	NFE will apply once construction is complete.

Table 4-4 - NFE Permits Related to Construction at the PREPA Site for San Juan Units 5 & 6

#	ACTIVITY	PERMIT	STATUS	PLAN
1	Construction of air emissions sources	Puerto Rico Environmental Quality Board Air Permit	Assessment of San Juan Units 5 & 6 currently underway.	No construction permit is expected to be required under the Environmental Quality Board rules for the
			NFE currently expects there will not be a significant air emissions increase in any air pollutant (net	LNG conversion. If selected, NFE will assist PREPA in the

#	ACTIVITY	PERMIT	STATUS	PLAN
			emissions are projected to decrease), unless PREPA determines the conversion should be to LPG.	preparation of any applications as necessary and would submit application immediately upon receiving OGPe Construction Permit.
2	Construction at PREPA site for San Juan Units 5 & 6	Construction Permit	Pending infrastructure endorsements.	If selected, NFE will apply once construction design and any necessary infrastructure endorsements have been received.
3	Authorization of erosion and sediment control measures, fugitive emissions, and waste disposal during construction	Consolidated General Permit	NFE is currently drafting plans for erosion and sediment control, fugitive emissions mitigation, and waste disposal for construction at the micro fuel handing facility.	If selected, NFE will modify its plans address regasification and connection to PREPA prior to application or, if such permit has already been approved, NFE will amend it accordingly.
4	Removal of lead-based paint during construction, if applicable	Lead-based Paint Removal Permit	To discuss if construction will impact lead-based paint in PREPA's facility.	If selected, NFE will apply as necessary.
5	Removal of asbestos during construction, if applicable	Asbestos Removal Permits	To discuss if construction will impact asbestos- containing materials in PREPA's facility.	If selected, NFE will apply as necessary.
6	Demolition of any existing structures, if applicable	Demolition Permit	Unlikely to be required.	If selected, NFE will apply as necessary.

Table 4-5 - Illustrative PREPA Permits (NFE Will Assist with Preparation and Submission as necessary)

#	ACTIVITY	PERMIT	STATUS	PLAN
1	Ownership or operation of air emissions sources (regasification equipment and/or San Juan Units 5 & 6)	Title V Permit	Evaluation of air emissions equipment at PREPA site underway.	PREPA's Title V Permit must be modified to include any new air emissions sources and/or pollution control equipment. If selected, NFE will assist PREPA in modifying its Title V Permit based on

#	ACTIVITY	PERMIT	STATUS	PLAN
				equipment owned or operated by PREPA.
2	Construction of air emissions sources	Prevention of Significant Deterioration ("PSD")/New Source Review ("NSR") Permit	Assessment of San Juan Units 5 & 6 currently underway. NFE currently expects there will not be a significant air emissions increase in any air pollutant (net emissions are projected to decrease), unless PREPA determines the conversion should be to LPG.	A PSD/NSR permit would not be required. If NFE is selected and the analysis determines that emissions will exceed PSD/NSR thresholds, NFE will assist PREPA in evaluating potential enforceable limits on its operations to avoid PSD/NSR permitting and/or preparing any permit application.
3	Construction and operation of converted San Juan Units 5 & 6	Environmental Document	Assessment of San Juan Units 5 & 6 currently underway.	If selected, NFE will assist PREPA in preparing and submitting its applicable environmental document to OGPe.
4	Changes to discharges of stormwater as a result of the work on San Juan Units 5 & 6 and change to the operational status of San Juan Units 5 & 6 during construction	PREPA's current National Pollutant Discharge Elimination System ("NPDES") may need to be modified or updated.	NFE understand that draft NPDES permit No. PR0000698 is currently pending.	If selected, NFE will assist PREPA in preparing and submitting any necessary modifications or updates to its NPDES permit.
5	If applicable, authorization of/modifications to wireless radio services	PREPA's Federal Communications Commission ("FCC") License(s), if any	To discuss if PREPA has any FCC licenses that will be affected by conversion of San Juan Units 5 & 6.	If selected, NFE will assist PREPA in applying for or modifying the relevant FCC licenses, as necessary.

4.2 FEDERAL APPROVALS: JONES ACT & DEPARTMENT OF ENERGY LETTERS

Please refer to the following exhibits:

- Exhibit 33 Evidence of Jones Act Compliance
- Exhibit 45 Department of Energy Natural Gas Import Approval

4.3 PUERTO RICO PORTS AUTHORITY LETTER

Please refer to the following exhibit:

Exhibit 34 – Puerto Rico Ports Authority Letter of Support

4.4 MITSUBISHI LETTER

Exhibit 26 – Mitsubishi Letter Confirming Subcontracting for Natural Gas Conversion and Responding to Inquiries Regarding LPG Conversion

4.5 ADDITIONAL LEGAL EXPLANATIONS / DOCUMENTS

4.5.1 Registered Puerto Rico Entity

NFE is formed as a Puerto Rico limited liability company and is properly registered to do business in Puerto Rico. Please see Exhibit 39 - Certificate of Formation, Exhibit 40 - Certificate of Good Standing and Exhibit 38 - Merchant's Registration Certificate.

4.5.2 Commitment to Compliance with Applicable Law

NFE is committed to complying with all applicable law, including Puerto Rico or U.S. laws and requirements relevant to the proposed project. NFE has not been the subject of a government investigation in the U.S. or Puerto Rico. NFE has not been the subject of any recent or historical legal proceedings, interviews or investigations by any US law enforcement agency involving our firm or team related to transactions executed in or on behalf of the Government of Puerto Rico and/or its public corporations. NFE has not been the subject of any adverse findings that would prevent PREPA from selecting NFE, including:

- Negative findings from a Federal Inspector General or from the U.S. Government Accountability Office, or from an Inspector General in another state.
- Pending or unresolved legal action from the U.S. Attorney General or from the U.S an attorney general in Puerto Rico or another state.
- Pending litigation with the Government of Puerto Rico, or any other state.
- Arson conviction or pending case
- Harassment conviction or pending case.
- Puerto Rico and Federal or private mortgage arrears, default, or foreclosure proceedings
- In rem foreclosure.
- Sale tax lien or substantial tax arrears.
- Fair Housing violations or current litigation.
- Defaults under any Federal and Puerto Rico-sponsored program.
- A record of substantial building code violations or litigation against properties owned and/or managed by Proponents or by any entity or individual that comprises Proponents.
- Past or pending voluntary or involuntary bankruptcy proceeding.
- Conviction for fraud, bribery, or grand larceny.

4.5.3 Commitment to Compliance with Permitting Requirements

NFE is committed to adhering with all applicable Federal and Puerto Rico permits and regulations. NFE's commitment is shown by our work done so far in these areas, as evidenced by the attached Jones Act Letter, completion of the Coast Guard LOR process and our progress on permitting the micro fuel handling facility shown in Section 4.1. Our legal team is closely integrated with our business team, allowing us to comply with permitting requirements efficiently in accordance with our developments and operations.

4.5.4 Advisory or Other Contracts with Government Entity in Puerto Rico

NFE does not have any current or former advisory contracts with any Government Entity in Puerto Rico. NFE does have a lease with PRPA, as discussed in Section 2.1.4 and evidenced by our letter with PRPA in Exhibit 34. Other than that lease, NFE does not have any significant contracts with any Government Entity in Puerto Rico.

4.5.5 No Work for Creditors or Guarantors of Puerto Rico

NFE has not performed any work for creditors or guarantors of the Government of Puerto Rico or any public corporation debt about their positions in Puerto Rico debt obligations.

4.5.6 Certificates and Certifications

Please find as exhibits to this proposal the following certificates and certifications:

- Income Tax Certification from MRCC (Exhibit 35)
- Property Tax Certification from CRIM (Exhibit 36)
- Sales and Use Tax Certification from the Treasury Department (Exhibit 37)
- Merchant's Registry Certificate (Exhibit 38)
- Certificate of Formation (Exhibit 39)
- Certificate of Good Standing (Exhibit 40)
- Certification of compliance with Ethics Act of the Government of Puerto Rico, on PREPA's form. (Exhibit 41)
- Certification to comply with Act No. 2-2018 which established the Anti-Corruption Code for a New Puerto Rico on PREPA's form. (Exhibit 42)
- Sworn statements. (Exhibit 43)
 - Sworn Statement on PREPA's form that neither NFEnergía LLC nor its affiliates has pled guilty to various crimes.
 - Certification that NFE has made all payments required for unemployment, workmen's compensation, and social security for chauffeurs. NFE will provide a certification from the Department of Labor or on a form from PREPA if requested and provided.
 - Certification that NFE, nor any of its owners, affiliates or subsidiaries have any debt or legal procedures to collect child support payments registered with the Puerto Rico Child Support Administration. NFE will provide a certification on PREPA's form if requested and provided.

- Certification that if there is any Judicial or Administrative Order demanding payment pursuant to Act No. 168-2000, NFE is current and in all aspects of compliance. NFE will provide a certification on PREPA's form if requested and provided.
- Certification of no conflict of interest on PREPA's form (Exhibit 44)

4.6 LIST OF EXHIBITS

The following exhibits are included in the appendix.

- 33. Evidence of Jones Act Compliance
- 34. Puerto Rico Ports Authority Letter of Support
- 35. Income Tax Certification from MRCC
- 36. Property Tax Certification from CRIM
- 37. Sales and Use Tax Certification from the Treasury Department
- 38. Merchant's Registry Certificate
- 39. Certificate of Formation
- 40. Certificate of Good Standing
- 41. Certification of compliance with Ethics Act of the Government of Puerto Rico, on PREPA's form.
- 42. Certification to comply with Act No. 2-2018 which established the Anti-Corruption Code for a New Puerto Rico on PREPA's form.
- 43. Sworn statements
 - a. Prohibition Against Awarding Bid or Contract to Juridical Person Convicted of Felonies or Misdemeanors
 - b. Puerto Rico Child Support Administration
 - c. Compliance with the Department of Labor of the Commonwealth of Puerto Rico
 - d. Law for the Strengthening of the Family Support and Livelihood of Elderly People
- 44. Non-Conflict of Interest
- 45. Department of Energy Natural Gas Import Approval



SECTION 5.0

Financial Information & Required Qualifications



5.0 Financial Information & Required Qualifications

5.1 CAPITAL COST ESTIMATE

The cost of converting San Juan Units 5 & 6 to run on natural gas is estimated to be approximately \$30MM, which includes all work by Mitsubishi on the gas turbines and Black & Veatch, TSK and local subcontractors on the balance of the plant for engineering, construction and commissioning.

5.2 FINANCIAL ABILITY

NFE does not have any financing contingencies in order to complete the project.

Please refer to Exhibit 46 for audited financial statements for NFEnergía LLC and Fortress Investment Group LLC.

Please refer to Exhibit 47 for letter from a bonding company that commits the bonding company to provide the required bonding on behalf of NFE if awarded the contract for the Project.

Please refer to Exhibit 48 for letter from an insurance company, satisfactory to PREPA that commits the insurance company to provide the required insurance on behalf of NFE if awarded the contract for the Project.

5.3 LIST OF EXHIBITS

The following exhibits are included in the appendix.

- 46. Audited Financial Statements
 - a. NFEnergía LLC
 - b. New Fortress Energy Holdings LLC Balance Sheet
 - c. Fortress Investment Group LLC
- 47. Bonding and Surety Letter
- 48. Insurance Letter