

NRG ASTORIA REPOWERING PROJECT VOLUME 1 - PROPOSAL



INQUIRY NUMBER Q13-5441LW CONTINGENCY PROCUREMENT OF GENERATION AND TRANSMISSION

SUBMITTED TO: NEW YORK POWER AUTHORITY

DATE: MAY 20, 2013



The power to change life. The energy to make it happen: THIS PAGE INTENTIONALLY LEFT BLANK





Safe Harbor for Forward Looking Statements

This document contains forward-looking statements within the meaning of Section 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934. Forward-looking statements are subject to certain risks, uncertainties and assumptions and typically can be identified by the use of words such as "expect," "estimate," "should," "anticipate," "forecast," "plan," "guidance," "believe" and similar terms and include our strategy, expected benefits and timing of the Astoria project. Although NRG believes that its expectations are reasonable, it can give no assurance that these expectations will prove to have been correct, and actual results may vary materially. Factors that could cause actual results to differ materially from those contemplated above include, among others, general economic conditions, hazards customary in the power industry, weather conditions, competition and changes in wholesale power markets, the volatility of energy and fuel prices, failure of customers to perform under contracts, changes in government regulation of markets and of environmental emissions, the condition of capital markets generally, our ability to access capital markets, unanticipated outages at our generation facilities, adverse results in current and future litigation, failure to identify or successfully implement acquisitions and repowerings, the inability to implement value enhancing improvements to plant operations and companywide processes, and our ability to realize value through our hedging strategy.

NRG undertakes no obligation to update or revise any forward-looking statements, whether as a result of new information, future events or otherwise. The foregoing review of factors that could cause NRG's actual results to differ materially from those contemplated in the forward-looking statements included in this Response should be considered in connection with information regarding risks and uncertainties that may affect NRG's future results included in NRG's filings with the Securities and Exchange Commission at <u>www.sec.gov</u>.

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May 20, 2013 DELIVERED BY HAND

Mr. Len Walker, Manager of Special Projects New York Power Authority 123 Main Street White Plains, NY 10601-3170

Re: New York Power Authority ("NYPA") Inquiry No. Q13-5441LW Response Submittal Dear Mr. Walker:

On behalf of NRG Energy, Inc. ("NRG"), I am delighted to provide the enclosed bid to repower NRG's Astoria facility with new, state-of-the-art, combined cycle technology (the "Project"), is in response to the Request for Proposals ("RFP") for Inquiry Number Q13-5441LW for the Contingency Procurement of Generation and Transmission issued April 3, 2013.

The enclosed bid meets all of the requirements included in the RFP:

- pricing in this bid is firm through December 31, 2013 and has been approved by NRG's Board of Directors;
- the Project's Commercial Operation Date ("COD") is June 1, 2016;
- the Project will be located in NYISO Load Zone J; and
- the Project provides 459 MW of net incremental capacity as identified at the site in the 2012 Reliability Needs Assessment.

Furthermore, we believe the Project is a superior bid, and provides numerous additional benefits to New York and to NYPA, including:

- certainty the Project is receiving immense local support and has already obtained its air permits;
- dispatchable, firm capacity with a high efficiency located in New York City; and
- unmatched environmental benefits, dramatically reducing on-site emissions in Astoria.

We are extremely excited about the Project. This Project is the premier development project in the entire NRG portfolio. The NRG team is ready and committed to working with you to make this long-awaited opportunity a reality for New York and NYPA. If you should have any questions, please contact me, or Jon Baylor, the lead developer for the Project.

Kindest Regards,

William Lee Davis Senior Vice President and East Region President NRG Energy, Inc.

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EXECUTIVE SUMMARY

NRG Energy, Inc. ("NRG") is pleased to offer the Astoria Repowering Project (the "Project") in response to the New York Power Authority ("NYPA") "Contingency Procurement of Generation and Transmission" Request for Proposals (the "RFP"). As an existing generator in New York, NRG is uniquely positioned to offer repowering and incremental generation solutions that are supported by experienced operations and management personnel who have worked in New York for many years. NRG's experience in developing, permitting and constructing projects in New York and across the United States will provide NYPA a high level of confidence that the Project will be delivered on time and will help achieve the goals of the RFP.

The Project offers 520 MW of total generation capability, including 459 MW of incremental capacity (NRG will deactivate and permanently retire 61 MW¹ of existing Westinghouse turbines at the Astoria site as part of the Project). The Project is fully permitted, substantially advanced in its interconnection agreements, and enjoys remarkable local support.

The Project will deliver significant environmental benefits by utilizing an existing brownfield site and dramatically reducing emissions by replacing older, less-efficient oil-burning units with state-of-the-art combined cycle technology.

The Project meets two important goals of the New York Energy Highway Blueprint: repowering and repair. Adding incremental capacity to an existing facility in a transmission-constrained area and using existing connections and infrastructure expands and strengthens New York's Energy Highway. Additionally, the Project will enhance reliability by accelerating the investments needed in generation resources in New York.

Overall, NRG believes the Project is a competitive and beneficial offering that contributes to the goals of the State of New York in the RFP process. The remainder of this document details this exciting Project.

¹ Based on the New York Independent System Operator 2012 Reliability Needs Assessment



We are excited about the Project, and you should be too. The NRG team is ready to move the Project forward, and we are ready to meet with you to address any questions you have.



PROJECT DESCRIPTION

COMPANY OVERVIEW

NRG is a Fortune 300 and S&P 500 Index company, and a pioneer in developing cleaner and smarter energy choices for our customers: whether as one of the largest solar power developers in the country, or by building eVgo, the first privately funded electric vehicle charging infrastructure, or by giving customers the latest smart energy solutions to better manage their energy use. Our diverse power generating facilities include over 47,000 megawatts ("MW") from solar, wind, fossil and nuclear enough to support almost 40 million homes. Our retail electricity providers—Reliant, Green Mountain Energy Company and Energy Plus—and our district heating and cooling operations serve more than two million customers in 16 states.

PROJECT SITE AND OVERVIEW

Located in Astoria, Queens County, New York, the Project will replace seven existing, oil-fired Westinghouse units with two new, state-of-the-art combined cycle ("CCGT") units totaling 520 MW, or 459 MW of incremental capacity.

NRG's proprietary CC-Fast technology is based on General Electric's existing 7FA turbine technology that can operate as peaking units, achieving 131 MW of load on each combustion turbine in 10 minutes, and can be at full load (260 MW) in 45 minutes. While traditional CCGT projects require three to four hours or more to reach full load operations, CC-Fast was designed with the demands of the New York Zone J market in mind. Because of its reduced start time, the CC-Fast unit will provide the New York market with the flexibility to meet the demand needs of this heavily-constrained load pocket while delivering superior efficiency ordinary peaking units cannot deliver.

Since announcing the Project in 2006, NRG has been an outspoken advocate for the beneficial reuse of existing power generation sites across our fleet. The 2009 New York State Energy Plan cited the Project as a prime example of a way to achieve higher generation density and efficiency along with reduced emissions at an existing generation site. The New York Energy Highway Blueprint reiterated this same goal when recommending that New York "support repowering of existing power plants to improve

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efficiency and protect the environment." The Project will successfully satisfy this goal and will produce the greatest impacts in New York City at the lowest cost.

The Project has obtained all necessary permitting and regulatory approvals to begin construction. Final air permits were awarded in October 2010 with the unanimous support of the local community. Despite a significant increase in capacity and operating hours, the Project will realize an annual <u>reduction</u> of nitrogen oxide ("NOx") emissions of more than 65% and reduce annual particulate matter ("PM") emissions by 45%.

With more than 5,000 MW of capacity located in a small area in the Astoria neighborhood, Astoria residents understand the impacts large generation projects have on local air quality. Because of the Project's significant emissions reductions, the local community has rallied behind the Project and enthusiastically supported the Project throughout the air permitting and development process. In April 2012, business, labor, health, environmental groups and community organizations joined federal, state and local elected officials in Queens to launch the *Smart Power NY* coalition to further support the Project. Since its launch, the coalition has continued to increase support for the Project.

In addition to unmatched air quality benefits, significant economic benefits will also accrue to New York City as well as New York State ratepayers if the Project moves forward. An independent analysis of the Project's benefits over the first 10 years of operation found that the Project delivers \$2.9 billion in wholesale market savings to ratepayers. The analysis also expects that macroeconomic benefits of \$312 million per year will accrue to the economies of New York City and New York State from the significant local investment, long term jobs impact and ratepayer savings generated from this Project.



PRICING

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Price Competitiveness	

Further, repowering an existing site as proposed here produces a significant benefit to projects that are tested for market mitigation. The reduced capital cost and site benefits of the Project enhances the



The Project currently has two active interconnection queue positions – one for each unit – at the Astoria West 138kV and the Astoria Annex 345kV sub stations. Queue positions #201 and #224 are in the 2011 Class Year, which is being studied as of the date of this submission. Final mitigation determinations will be made when the Class Year is finalized, which is expected in June 2013. The second unit, Queue #266, will be studied in Class Year 2012 and is expected to realize the same cost benefits of the unit being studied today.

HALTING MECHANISM

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POWER PURCHASE AGREEMENT

Redline copies of the PPA are attached as Appendix 1 to this proposal. NRG has also provided a list of Deviations and Exceptions to the PPA in Appendix 1 with descriptions of reasons for any proposed changes.



SCHEDULE

NRG has designed its construction plan and Project timeline to meet the June 1, 2016 COD. The proposed schedule is aggressive and leaves no time for variability in the construction schedule. As such, NRG strongly recommends an expedited PPA negotiation and regulatory approval schedule for all required rate recovery mechanisms.





Key dates:

- PSC approval September 19, 2013
- Execution of binding term sheet with NYPA September 30, 2013
- Limited Notice to Proceed October 1, 2013
 - Pre-Construction Engineering
- Turbine Orders Placed October 15, 2013
- Contract execution November 26, 2013
- Final Notice to Proceed December 1, 2013
- Demolition of existing Westinghouse Units December 15, 2013
- Site Mobilization April 1, 2014
- Financial Close February 2014
- Turbine Delivery December 2014
- First Plant Firing February 2016
- Plant testing May 2016
- COD June 1, 2016

NRG and Astoria Gas Turbine Power LLC will obtain any necessary FERC authorizations and will make any necessary filings with FERC to achieve the June 1, 2016 COD.

This schedule is achievable but the critical path items to achieving full COD remain execution of full regulatory approval and agreements in the timeline shown above. Recent state-mandated RFP processes in New Jersey and Maryland have experienced significant legal challenges. Due to the regulatory risk of these processes, NRG has received comments from potential lenders requiring full regulatory approval that is not subject to appeal prior to any lending commitment. Without full regulatory approval of the contract award and the associated rate recovery approval, the Project will likely not receive attractive financing commitments.



BIDDER QUALIFICATIONS

Astoria Gas Turbine Power LLC, a wholly-owned subsidiary of NRG, was formed as a limited liability company in Delaware in 1999. Its Certificate of Formation was amended and restated on December 17, 2003, as evidenced in Appendix 5. Astoria Gas Turbine Power LLC's site control is evidenced by the Deed of Conveyance dated June 25, 1999 between Consolidated Edison Company of New York, Inc. and Astoria Gas Turbine Power LLC, as evidenced by Appendix 5.

NRG is a public corporation organized in Delaware. See Appendix 2 for NRG's 2012 Form 10-K filing with the Securities and Exchange Commission for additional information. Astoria Gas Turbine Power LLC does not produce audited financial statements. In accordance with the instructions of Section 8.7 of the NYPA Information for Proposers for RFP NO. Q13-5441LW, the financial statements for the three most recent fiscal years of Astoria Gas Turbine Power LLC's parent, NRG, are included in the attached NRG Form 10-K beginning on page 111.

NRG and its subsidiaries own and operate electric generating facilities and provide retail electric power throughout large parts of the United States. Accordingly, at any time, NRG and its subsidiaries can be the subject of multiple civil proceedings. In accordance with the instructions of Section 8.6 of the NYPA Information for Proposers for RFP NO. Q13-5441LW, details regarding the current status of these proceedings are detailed in the NRG Form 10-K, which is attached hereto as Appendix 2, on pages 51-56.

All products and services provided by the Project will be in compliance with all applicable legal and regulatory requirements.

NRG ENERGY, INC. OVERVIEW

NRG is a competitive power and energy company that aspires to be a leader in the way the industry and consumers think about, use, produce and deliver energy and energy services in major competitive power markets in the United States. NRG's wholesale operations are engaged in the ownership and operation of power generation facilities; the trading of energy, capacity and related products; and the transacting in and trading of fuel and transportation services. Second, while leveraging its core wholesale power business, NRG's retail division is engaged in the supply of energy, services, and



innovative, sustainable products to retail customers in competitive markets through multiple channels and brands like Reliant Energy, Green Mountain Energy, and Energy Plus. Finally, NRG is a clean energy leader and is focused on the deployment and commercialization of potentially transformative technologies, including electric vehicles, distributed solar and smart meter technology, which have already demonstrated the potential to change the nature of the power supply industry.

BUSINESS HISTORY AND ORGANIZATION

NRG began its commitment to New York in 1999 by investing approximately \$945 million in five fossilfueled power generating facilities, making NRG one of the top investors within New York. In December 2012, NRG completed its acquisition of GenOn Energy, Inc., which allowed NRG to expand its wholesale generation base by adding the Bowline facility. Examples of NRG's continuing commitment to the State include:

- more than 4,250 MW of net generating capacity;
- more than 500 employees dedicated to generating power safely and economically;
- converting its Western New York coal-fired units in 2005 to Powder River Basin ("PRB") lowsulfur coal which dramatically improves environmental performance;
- investing \$300 million to retrofit Western New York coal units with emissions controls systems that reduce nitrous oxides ("NOx"), sulfur dioxide ("SO2"), and particulate matter ("PM") emissions; and
- continued commitment to redeveloping existing New York facilities to improve emissions and efficiency within New York.

CONTACT INFORMATION

For additional information related to this submission, please contact:

Jon Baylor Senior Director, Development NRG Energy, Inc. 211 Carnegie Center Princeton, NJ 08540 Office: 609.524.4958 Email: jonathan.baylor@nrgenergy.com



NRG'S EXPERIENCE IN ELECTRIC GENERATION AND SYSTEM OPERATOR

NRG is one of the largest and most diversified power generation operators in the United States, with approximately 47,000 MW of fossil fuel and nuclear generation capacity across 100 plants. The company has an additional 1,678 MW under construction. NRG's power generation assets are diversified by fuel-type, dispatch level and region, which helps mitigate the risks associated with fuel price volatility and market demand cycles.

A full list of NRG's existing generating plants is located in Appendix 2.

NRG'S NYISO MEMBERSHIP STATUS

NRG is a full market participant and has been a full member of the New York Independent System Operator ("NYISO"). NRG is on the management committee, and has been a member of NYISO since NYISO's establishment in 1999.

Since 1999, NRG has participated in several NYISO committees and working groups that deal with issues of market structure and operations. The NYISO committees that NRG focuses on are listed below.

<u>NYISO Management Committee ("MC")</u> – The MC makes recommendations to the NYISO Board. The MC also votes on motions brought by NYISO's Business Issues Committee and the Operating Committee. NRG attends all MC meetings where votes take place regarding recommendation of rule changes of interest to the wholesale marketplace. In addition, NRG is active in the Budget and Priorities Working Group and monitors the discussions on NYISO's project prioritization efforts.

<u>Business Issues Committee ("BIC")</u> – The BIC votes on motions brought by the various working groups established from time to time. Some of the important working groups to NRG are:

- <u>Installed Capacity Working Group</u> NRG works on capacity market design, auction procedures, as described in the Installed Capacity manual, and rules for participating in capacity markets.
- <u>Load Forecasting Task Force</u> NRG monitors the development of this group's production of annual load forecasts used for the Installed Reserve Margin and Locational Minimum Installed Capacity Requirements.



- <u>Market Issues Working Group</u> NRG monitors and advocates rules for pricing of energy and ancillary service products.
- <u>Black Start Task Force</u> NRG actively engages in discussions on Black Start requirements and compensation in New York.

<u>Operating Committee ("OC") -</u> The OC votes on motions brought by the working groups that focus on operational issues. Those in which NRG is most active are:

- <u>Transmission Planning Advisory Subcommittee ("TPAS")</u> NRG has a strong interest in the TPAS agenda and priorities to ensure advancement of critical projects, currently in the interconnection queue. TPAS oversees NYISO's administration of the queue and recommends for OC approval System Reliability Impact Study scopes and final reports.
 - Interconnection Project Facilities Study Working Group NRG has a strong interest in and is engaged in the construction and assumptions of allocations of System Deliverability Upgrades and System Upgrade Facilities for a Class Year.
- <u>Electric System Planning Working Group</u> NRG provides input into this group's primary functions – development of the Congestion Assessment and Resource Integration Study, the annual Reliability Needs Assessment, and the Comprehensive Reliability Plan.
- <u>Interconnection Issues Task Force</u> NRG assists this group with development of interconnection rules that apply for qualification to sell NYISO products for new generation interconnections.
- <u>Electric Gas Coordination Working Group</u> NRG has been engaged in the NYISO's new efforts to understand and eliminate the seams between the Electric and Gas industries in New York.

Other groups that report into BIC and OC, in which NRG participates from time to time include:

- Price Responsive Load Working Group;
- Credit Policy Working Group;
- Billing and Accounting Working Group;
- System Operations Advisory Subcommittee;
- Reactive Power Working Group; and
- Restoration Working Group.

In summary, NRG fully supports and applies its resources and attention to the NYISO stakeholder process. NRG's ownership of a geographically- and technologically-diverse set of generating resources positions the company to provide positive, meaningful inputs to the stakeholder process.



CORE PROJECT TEAM

NRG has assembled a world-class team to bring the Project to fruition. NRG is organized both by geographic region as well as by professional function with substantial interaction with NRG's senior and executive staff level. The overall lead for the Project is a senior developer working with a cross-functional team from NRG's corporate staff. For instance, the development engineering group working on this project consists of both regional engineers as well as senior level corporate engineers located in NRG's headquarters in Princeton.

The biographies for each of the team members provided below ultimately fall into one of the following areas of NRG: NRG East Region, Engineering and Construction, Operations, Commercial Operations (fuel and power market operations), Chief Financial Officer (finance, treasury, accounting, tax, and IT) and the General Counsel (both regulatory and transactional).

Senior Vice President and Regional President, East - Lee Davis

Lee Davis serves as Senior Vice President and Regional President, East, overseeing commercial and operating activities and business development for NRG Energy's largest region by generating capacity. With almost 22,000 megawatts of generating assets in the region, he is responsible for leading efforts to maximize the value of existing units, repower generating sites with more efficient units, reduce emissions from the region's fossil fueled plants and build new cleaner energy resources. Mr. Davis joined NRG in 2006 as Vice President of New York Development and took on the expanded role of Vice President of Northeast Business Development in January 2010. Prior to his current position at NRG, he took on various roles as a Vice President for Mirant Corporation and as Vice President of Strategic Origination at Calpine Corporation. Mr. Davis has a bachelor's degree from the Georgia Institute of Technology and a master of business administration degree from Emory University.

Senior Director, Conventional Development - Jon Baylor

Jon Baylor is the Senior Director of Conventional Development for NRG's East Region. Since joining NRG in 2004, Mr. Baylor has served in a number of roles that include asset management, finance, business development, investor relations and project restructuring. Mr. Baylor has served in his current role since 2007 and is development lead for a number of conventional and renewable repowering initiatives across NRG's fleet, including the Astoria Repowering project. He holds a Bachelor of Science degree from Bob Jones University in Finance and a master of business administration degree from Temple University.



General Counsel, East Region - Elizabeth Quirk-Hendry

Elizabeth Quirk-Hendry is General Counsel of NRG's East Region and has been with NRG since August 2010. Ms. Quirk-Hendry manages the legal issues related to all generating assets in the region including NRG's GenConn joint venture development project. Her practice covers a variety of electric technologies, including conventional fossil fuel technology, solar and on-shore wind from both a development and operations perspective. Ms. Quirk-Hendry has practiced law in the energy sector for over eighteen years. She is a graduate of New York University School of Law and Colgate University.

Plant Manager, Astoria Gas Turbines - Les Ross

Les Ross serves as the Plant Manager for NRG Energy's Astoria, Connecticut Jets and Norwalk generating stations with a combined capacity of over 1000 MW's. Mr. Ross joined NRG in 1999 and has served in multiple roles for NRG and has been a Plant Manager for 11 years. His most recent accomplishments include a role in the design, construction, commissioning and oversight of a 200 MW peaking generation facility in Devon, Connecticut for the GenConn Energy LLC partnership. Mr. Ross has a bachelor's degree in Marine Engineering from the U.S Merchant Marine Academy in Kings Point, NY.

Director, Development - Laurie Jodziewicz

Laurie Jodziewicz is as a Director of Development at NRG Energy, Inc. Prior to her current position she served as Director of Permitting and Development at NRG Bluewater Wind beginning in April 2010. She has been active in the energy industry since 1998, most recently at the American Wind Energy Association. For more than six years, she managed project siting, wildlife, and offshore wind policy issues before industry organizations, government agencies, environmental groups, and the media. She also gained experience in a number of energy organizations spanning the solar, distributed generation, and natural gas industries. Ms. Jodziewicz holds a Bachelors of Arts in International Politics from The George Washington University.

Senior Manager, Environmental Compliance - Tom Coates

Tom Coates has been the Regional Manager of Environmental Business for the Company's New York Region since June 1999. He is responsible for environmental compliance and permitting for the NRG New York power generating facilities. Prior to coming to NRG, Mr. Coates served as the Environmental Manager for Niagara Mohawk Power Corporation's Fossil and Hydro Generation Business Unit. He has an extensive power plant background managing air and water program compliance and permitting. Before entering the electric generating business in 1984, he held various research positions with the Freshwater Institute at the Rensselaer Polytechnic Institute and the New York State University Research Center at Oswego. He also worked as a fisheries biologist with the US Fish and Wildlife Service. Mr. Coates holds a Bachelor's degree in Aquatic Zoology from the University of Montana.

Vice President, Treasury - Gaetan Frotte

Gaetan Frotte is VP-Assistant Treasurer at NRG Energy, Inc. In addition to being responsible for the corporate cash management and debt compliance functions, he leads the structured financings of all new NRG power generation projects. Prior to joining NRG Energy in 2006, he served for 7 years for Reliant Energy in Houston at various corporate finance positions and



worked before that for a subsidiary of France Telecom in Paris and Arlington, Virginia. Mr. Frotte graduated in 1999 from the University of Virginia's Darden School of Business.

Director Asset Management, East - Danita Park

Danita Park joined NRG as the Director Asset Management serving the East Region in 2012. Ms. Park is responsible for a fleet of nearly 7,000 MWs of oil and natural gas assets located in New York, New Jersey, Pennsylvania and New England. In this role, she develops and executes strategies to maximize the profit of each asset in her fleet. Ms. Park joined NRG from Calpine Corporation where she was responsible for optimizing assets with long term contracts; developing day-ahead bidding strategy; and improving P & L by increasing recovery start-up costs. Before joining Calpine, she held several positions with Dynegy Power Marketing, including managing the real time commercial operations in the Northeast. Ms. Park holds a Bachelor of Science degree in Biochemistry and a Master of Business Administration, Finance, both from the University of Calgary, Canada.

Vice President, Asset Management - Judith Lagano

Judith Lagano is a Vice President of Asset Management for NRG's East Region with responsibility for nearly 22,000MW of generation in NY, PJM, New England, and Florida. Ms. Lagano is an energy industry professional with over 25 years of experience in the power business in engineering and asset management. She graduated with a BS in Civil and Environmental Engineering from Cornell University and an MBA from Baruch College. She is also a registered Professional Engineer in New York and New Jersey. Before joining NRG Energy in 2001, she was General Manager of Hydroelectric and Cogeneration Projects for United American Energy in Woodcliff Lake, NJ.

Vice President, Wholesale Regulatory Strategy & Policy - Bradley Kranz

Bradley Kranz, Vice President of Wholesale Regulatory Strategy & Policy, East Region. Mr. Kranz has been with NRG since 2007. He is responsible for managing regulatory activities in the New York, New England and PJM market regions. Additionally, Mr. Kranz oversees NRG's wholesale regulatory interactions with the East Region ISO/RTOs, state public service commissions and FERC. Prior to joining NRG, Mr. Kranz worked for the New York Independent System Operator (NYISO) where he held various positions in Operations, Engineering and Market Services. Before the NYISO, he was employed by Niagara Mohawk Power Corporation in upstate New York as an engineer at the Nine Mile Point Nuclear station. Mr. Kranz holds an MBA from Union College and a Bachelor's degree in Mechanical Engineering from the Rochester Institute of Technology.

Vice President, Government Affairs East Region - Raymond Long

Raymond G. Long is the Vice President of Government Affairs for NRG Energy's East Region. Mr. Long has more than 20 years of experience managing corporate external campaigns and initiatives and has been with NRG since 2003. He is responsible for managing the external activities for NRG's portfolio of conventional generation, retail and renewable development in eastern United States – from Florida to Maine and west to Ohio. Additionally, Mr. Long manages legislative, regulatory and communications issues. Prior to joining NRG, Mr. Long served as Director of External Affairs for more than three years at Mirant Corporation, where he worked on state and federal issues in the United States and Eastern Canada. Before joining Mirant, Mr. Long spent eight years representing corporate clients on public affairs and strategic



communications issues in the New England States. Mr. Long has extensive experience working on corporate and political campaigns. Mr. Long holds a Juris Doctor from Suffolk University Law School and a Bachelor of Science degree in Public Policy and Administration from Suffolk University.

Vice President, Construction – General Projects - Gary Devore

Gary M. Devore serves as Vice President of NRG's Engineering and Construction department, Generation Projects. In this role, Mr. Devore has safety, budget, schedule and quality oversight responsibility for NRG's renewable and vaporous fossil fuel-based (principally natural gas) new generation platform projects. Mr. Devore joined NRG in 2010 as Vice President of Construction. Prior to his current assignment with NRG, he has accumulated 40 years of experience in the power and petrochemical design, construction, operations & maintenance and commissioning aspects of large capital projects. During his lengthy career, he has been managed, or been directly involved with, erection of over 30 gigawatts of new fossil-fuel generation, including natural gas, oil and coal on three continents. Mr. Devore has a bachelor's degree in mechanical engineering from Texas A&M University and holds a professional engineer's license in his home state of Texas.

Senior Vice President, Development Engineering, Procurement & Construction - Ben Trammel Ben Trammell serves as Senior Vice President of Engineering & Construction, overseeing NRG's \$8.8 billion portfolio of new generation facility construction and environmental compliance projects. He is responsible for overseeing development engineering support, EPC project formation, project and construction management, and start-up and commissioning for all major NRG projects. Mr. Trammell joined NRG in early 2012, having previously served in various utility and IPP planning, development, engineering, construction and generation plant operations management capacities for NextEra, Dynegy, Oglethorpe Power, and Southern Company. Mr. Trammell has a Bachelor of Science degree in Mechanical Engineering from Clemson University and executive leadership certifications from Center for Creative Leadership and Rice University.

Senior Director - Development Engineering - Steve Rose

Steve Rose serves as Senior Director in Development Engineering. Mr. Rose joined NRG Energy in 2007 and in various roles he has been responsible for conceptual design and performance engineering in support of new construction and repowering opportunities, as well as evaluation of new technologies and fleet performance enhancement. Mr. Rose has 36 years experience in conventional and renewable energy project development and execution with an emphasis on simple and combined cycle gas turbine applications, and is the principal inventor of NRG's patent pending CC-Fast[™] rapid response combined cycle technology. Prior to joining NRG, he served as Vice President of Engineering for ContourGlobal, an international power and infrastructure development company, and held a variety of technical and management positions at Power Technical Solutions LLC, several divisions of Enron including Enron Renewable Energy Corporation, Enron North America and Enron Engineering and Construction Company, Dresser-Rand Turbo Products and Bechtel Corporation. Mr. Rose has a B.S. in Mechanical Engineering from the University of Texas at Austin.



Director, Natural Gas - Jim Dauer

Jim Dauer is Director of Natural Gas at NRG Power Marketing, LLC, the commercial operations subsidiary of NRG Energy. He is responsible for supplying NRG's 30,000 MW of gas-fueled generation in New York, New England, PJM, Texas, Louisiana and California. Mr. Dauer and his staff also manage transport and storage integral to providing the flexibility required to supply NRG's diverse gas-fueled portfolio. Mr. Dauer has held this position since October, 2003. Previously, he served as a senior trader on the gas desk for NRG.

Director, Regional Portfolio - Michael Evans

Michael Evans serves as Portfolio Director for the New York, New England and Congestion Management Desks and has been involved in the New York markets since 1985. He joined NRG Energy in August 2004 as a Senior Trader and became the New York Portfolio Director in June 2006. Mr. Evans became Portfolio Director of the New England and Congestion Management desks in December 2012. Before joining NRG he held trading positions at Aquila Energy Marketing Corporation for six years and American Electric Power Corporation for two years. Mr. Evans started his career at the Long Island Lighting Company and held various positions in the Operations Department for 12 years. He graduated from Clarkson University with a Bachelor of Science degree in Electrical Engineering.

Vice President Operations, East – Mark Gouveia

Mark Gouveia serves as Vice President for East NRG Operations overseeing day to day operation for the region's fossil fired plants. Mr. Gouveia joined NRG as a result of the merger with GenOn in December of 2012. Prior to his current position at NRG, he held various staff and line leadership roles with Pacific Gas and Electric Company, Mirant and GenOn. Job responsibilities included plant management, construction and technical services. Well versed in a number of power plant technologies including coal/gas/oil fossil fired generation, wind and geothermal.

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FACILITIES AND EQUIPMENT

NRG has designed, patented and permitted a unique fast-start CCGT for the Project specifically to meet the needs of New York City. Based on GE's proven Frame 7FA combustion turbine, the design differs from traditional CCGT units by using a simpler steam-cycle process that can accommodate 10-minute start times and load-following operations more easily. A two pressure heat recovery steam generator ("HRSG") will be used instead of the traditional triple pressure HRSG design. This reduces start times and improves dispatch flexibility. CC-Fast will include conventional selective catalytic reduction ("SCR") and carbon monoxide ("CO") catalysts for emissions controls as well.

PROJECT SITE

NRG's Astoria generation facility is located on a 15-acre site at 31-01 20th Ave., Long Island City (Astoria), Queens County, New York within the 600+ acre Astoria Consolidated Edison ("Con Ed") complex. This complex is home to several power generating facilities, as well as barge facilities, a liquefied natural gas plant, a non-operational waste water treatment plant, and other miscellaneous operations. This area has been the site of power plants and associated activities since the 1890s and remains exclusively a major electric generating and manufacturing complex.

NRG currently owns and controls its Astoria generation facility site located in Queens (see Existing Site Layout in Figure 2). A copy of the relevant deed is included in Appendix 5. The Project will be developed within the existing site boundaries, on highly industrialized land and will use much of the existing site infrastructure as well as areas occupied by the Westinghouse units that will be retired in combination with the Project.





Although the Astoria generation complex has limited space, fuel delivery and transmission, the Project has been designed to provide multiple layers of flexibility to avoid further constraints on the system.

POWER GENERATING EQUIPMENT

The Project is designed to replace the seven existing Westinghouse 191 and 251AA units with two CC-Fast 1 X 1 CCGT designs utilizing:

• GE 7FA.04 dual fuel combustion turbines,



- GE non reheat industrial steam turbines,
- •

Each unit is designed to generate up to 273 MW at ISO conditions.

COMBUSTION AND STEAM TURBINES - GENERAL ELECTRIC

Both of the GE 7FA.04 Combustion Turbines ("CT") will be capable of providing 75% output (approximately 131 MW ISO) within 10 minutes of initiating the start sequence. Each CT will be dual fuel and capable of turndown to 60% output within emissions compliance. The CTs will be equipped with combustors to reduce NOx levels to no more than nine parts per million when operating on natural gas.

The GE Steam Turbine will be designed as a single-case non-reheat Steam Turbine operating at 1000 psia/1000°F throttle unfired, and up to 1320 psia fired. These units are simpler in nature than traditional triple pressure CCGT steam turbines. However, the designed steam cycle also provides increased dispatch flexibility to the unit without sacrificing efficiency.

Technical data related to GE's Combustion Turbines and Steam Turbines is included as Appendix 8.



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CONDENSER COOLING TOWER – GEA HELLER

NRG intends to deploy a GEA Heller Condenser cooling tower consisting of a direct-contact jet condenser, circulating pumps, water-to-air heat exchanger and auxiliary equipment required for operation.

GEA Heat Exchangers is a wholly owned entity of the GEA Group. The GEA Heat Exchangers Group consolidates all associated activities in the area of heat exchangers and comes with the largest portfolio of heat exchangers worldwide. Its technology offerings include plate heat exchangers, shell and tube heat exchangers, air-cooled heat exchangers, air filter systems, wet cooling towers, dry cooling systems and synthetic fillings, as well as air treatment systems for numerous areas of application. GEA truly provides comprehensive coverage of the spectrum. A description of GEA and their industry experience is provided in greater detail in Appendix 9.

ELECTRICAL SYSTEM (HIGH VOLTAGE)

The generator for the CT is a completely enclosed, hydrogen-cooled, synchronous unit. Each generator will have its own generator step-up transformer increasing the voltage to either 138 kV or 345 kV depending on the ultimate interconnection. The design incorporates a connection between the two power trains that provides redundancy which allows each CT to cross-connect and start other sister CT units on site.



CONSTRUCTION AND PERMANENT FINANCING ARRANGEMENTS

NRG intends to finance the Project in the commercial financial markets on competitive terms. NRG is prepared to develop, construct and operate the project as the sole equity investor and has the liquidity and financing experience to obtain project financing for the Project. NRG solicited feedback from several banks during the RFP process and has received indicative financing proposals based on the contract structures proposed herein. Based on discussions with potential lenders, NRG believes that an debt-to-equity financing structure is achievable on the proposed contract language.

PROJECT STRUCTURE

A traditional non-recourse project financing structure will be used to finance the Project. This will increase the attractiveness of the Project to sources of potential financing, as well as other project participants (such as EPC contractors), by providing flexibility and a structure that mitigates commercial risks by allocating them to the parties best able to manage them.

The following diagram (Figure 3) indicates the project components ("inputs") that must be executed, or in an advanced stage, prior to successfully raising third-party financing. These include an executed PPA or hedge, as well as interconnection arrangements. To date, initial development and engineering activities for the projects have been funded by NRG corporate funds and no project debt has been used or assumed.





Figure 3 – Astoria Project Components for Financing

PROJECT FUNDING

Based on discussions with lending institutions that are active in the project financing market, NRG anticipates that the Project will be funded with a combination of debt and equity throughout the term of the PPA. Although NRG can supply 100% of the required equity, NRG will preserve the ability to include additional equity partners, particularly in situations where such potential partners, by virtue of their core businesses and expertise, can contribute additional value to the Project to further assure its success. If third parties subscribe for equity in the Project, NRG will continue to retain a substantial ownership interest, reflecting its strong commitment to the Project. Sources of NRG equity will include its current cash balances as well as future cash flows generated by its existing operations.

Debt financing may include several tranches of debt with various terms and maturities syndicated among a broad range of domestic and international banks and financial institutions. A financeable PPA that includes features discussed in the PPA mark-up is included in Appendix 1 and throughout this bid package is a key assumption in our proposal and will be critical for the success or the Project. In


conjunction with negotiation of a financeable PPA, NRG will seek formal proposals from the lending community for a project finance package.

Table 1 summarizes the key financing terms that NRG believes, based on its recent experience successfully obtaining project financing and its ongoing consultations with leading financial institutions, could be available to the Project, assuming commencement of financing negotiations in late 2013 following execution of a long-term, financeable PPA and other material project contracts. These terms are generally consistent with those offered for non-recourse power plant financing in the United States.







NRG includes the following letters from institutions as indications of interest to finance the Project.

Inquiry No. Q13-5441LW Astoria Repowering Project











EVIDENCE OF CREDITWORTHINESS

NRG is currently the largest competitive power generation company in the United States, with a net generating capacity of over 47,000 MW, representing a diversified mix of fuel sources (including over 800 MW of renewable sources), generation technology, output configuration, and geographical location. The company has an additional 1,678 MW under construction. Beyond its wholesale generation business, NRG is a participant in the retail business in Texas and the Northeast, with over 59 TWh sold in 2012. This portfolio of assets and businesses generates significant cash flow, as indicated in NRG's financial statements and guidance.

NRG is a financially sound company with more than \$35.1 billion in assets and annual revenues of \$8.4 billion as of December 31, 2012. We have substantial liquidity to support new project construction and development, including almost \$2.1 billion in unrestricted cash and over \$1 billion in cash or letter of credit availability under our corporate revolver. Should NRG be unable to raise third-party financing to develop, construct and operate the Project, we possess sufficient resources to finance the project with 100% equity. As of May 15, 2013, NRG was rated BB-, Ba3, and BB by Standard & Poor's, Moody's and Fitch, respectively. Audited financial statements for NRG's three most recent fiscal years are attached to this proposal as the 2012 SEC Form 10-K found in Appendix 2.

EVIDENCE OF FINANCING EXPERIENCE

NRG has the financial resources and access to the lending community to implement the financing plan and construct the Project on budget and on schedule. As of May 2013, NRG has successfully financed net 3,666 MW of development projects on a non-recourse basis, resulting in \$6.9 billion of project debt financing, with competitive terms.

NRG has successfully raised financing for several utility-scale construction projects in the last several years, as demonstrated in the table below (Table 2):



Closed Transactions							
	Size						
Project	Generation	Financing	Net MW	\$Debt	Financial		
		type			Close		
Thermal	Thermal	Private	121	259	1993, 2002,		
		Placement			2010		
Peakers	Nat Gas	Banks	1,140	325	6/2002		
Sherbino	Wind	Banks	75	280	12/2008		
GenConn	Nat Gas	Banks	188	291	4/2009		
Blythe	Solar	Banks	21	36	6/2010		
South Trent	Wind	Banks	100	79	6/2010		
Avenal	Solar	Banks	25	186	9/2010		
Marsh Landing	Nat Gas	Banks	720	500	10/2010		
Ivanpah	Solar	DOE Debt	190	1,600	4/2011		
Roadrunner	Solar	Banks	20	68	5/2011		
El Segundo	Nat Gas	Banks	550	688	8/2011		
Agua Caliente	Solar	DOE Debt	148	967	8/2011		
CVSR	Solar	DOE Debt	250	1,237	9/2011		
Alpine	Solar	Banks	66	230	3/2012		
Avra Valley	Solar	Banks	25	73	8/2012		
Borrego	Solar	Hybrid	27	80	3/2013		
Total			3,666	6,899			

Table 2 - NRG Closed Transactions

All projects comply in all material aspects under their respective financing. Prior to its acquisition by NRG, the South Trent Project had defaulted on payment of its debt. However, upon acquisition, the default was cured and that project meets all material compliance obligations.

Given NRG's corporate strength and strategic interest in the success of the Project, as well as our proven ability to raise meaningful amounts of capital, NRG has the capacity to ensure the successful financing of the Project through the development, construction and operating life of the Project.

PROJECT FINANCING REFERENCES

Below are bank references, as well as more detailed descriptions of relevant projects and financing structures as requested by the RFP.







GENCONN

Overview. GenConn is a 50/50 joint venture between NRG and the United Illuminating Company, which owns two dual fuel-fired simple-cycle generating facilities, located in Milford and Middletown, Connecticut. Each facility, GenConn Devon and GenConn Middletown, is rated at a capacity of 190 MW. Both facilities are located on sites leased by NRG affiliates under 30-year lease arrangements. GenConn Devon and GenConn Middletown achieved commercial operations in June 2010 and June 2011, respectively. GenConn Devon and GenConn Middletown are each party to a 30-year Contract for Differences with Connecticut Light & Power.

Project-Level Financing. The construction of both facilities was partly financed with debt by a syndicated group of financial institutions under a non-recourse \$243 million construction loan and \$48 million working capital facility that closed in April 2009. The equity was partially funded by an equity bridge loan that was repaid in full by NRG at COD. The term loan accrues interest at a rate based on LIBOR plus a spread, and matures in April 2016. The working capital facility matures in April 2014 and provides liquidity for GenConn's ongoing operational needs in the form of borrowings or letters of credit. GenConn entered into LIBOR-to-fixed interest rate swaps with multiple counterparties to hedge the interest rate risk. These swaps require quarterly payments over the tenor of the term loan. The credit



facility includes customary affirmative and negative covenants and events of default. GenConn anticipates refinancing the term loan and working capital facility prior to their maturity.

EL SEGUNDO

Overview. El Segundo is a 550 net MW natural gas-fired combined-cycle turbine with fast-start capabilities located in Los Angeles County, California, which is situated on a brownfield site leased by and subject to an easement with NRG and adjacent to an existing natural gas-fired facility owned by NRG. We own a 100% membership interest in the facility, which is expected to achieve commercial operations in August 2013. We expect El Segundo will achieve substantial completion in July 2013, at which time it will have successfully met performance and emissions test criteria and be able to generate electricity. As of March 31, 2013, the construction of El Segundo had not deviated from the budgeted project costs, which include contingency costs, in any material respect. El Segundo is party to a 10-year tolling agreement with Southern California Edison.



MARSH LANDING

Overview. Marsh Landing is a 760 net MW natural gas-fired simple-cycle gas turbine located in Contra Costa County, California, situated on a brownfield site adjacent to the existing natural gas-fired Contra



Costa facility owned by NRG. Contra Costa Units 1 to 5 inclusive have been retired and Units 6 and 7 remain in operation. We own a 100% membership interest in the plant, which achieved commercial operations in May 2013, on schedule and within budget.



AVRA VALLEY

Overview. Avra Valley is a 25 MW solar generation facility located outside northwest Tucson, Arizona, which commenced operations in December 2012. We own 100% of the membership interest in the project, which is situated on a 320-acre site leased from the City of Tucson under a 20-year lease agreement. Avra Valley is party to a 20-year PPA with Tucson Electric Power which expires in 2032.







ELECTRICAL INTERCONNECTION

NYISO INTERCONNECTION STATUS

At its existing facility located at the Astoria site, NRG controls interconnection positions at both the Astoria East 138 kV substation and the Astoria West 138 kV substation. With these existing interconnection positions, NRG owns 646 MW of grandfathered capacity deliverability rights that can be used to support the Project. The existing interconnection and deliverability rights provide the Project with the ability to electrically interconnect with minimal interconnection upgrades in order to participate as an energy and capacity resource in New York City.

Furthermore, the Project has access to the new Astoria Annex 345 kV substation located less than 300 yards away (Figure 4). While physically located in Astoria, the Astoria Annex feeds power directly into lower Manhattan. Con Ed has recently completed an emergency reliability transmission project to connect the Astoria Annex 345 kV substation to the Astoria East 138 kV substation. This connection will allow generation connected at the 345 kV location to supply the local 138 kV system and vice-versa, meaning that the Project, when complete, will significantly reinforce system reliability in both the local load pocket and Manhattan, with a level of certainty and within a timeframe that no other project can currently offer.





Figure 4 - Astoria Site and Interconnections

The Project currently has three active interconnection queue requests with the NYISO that will support the interconnection of the full Project output (Figure 5). Queue positions 201 and 224 total 250 MW interconnecting to the Astoria West 138kV substation. These positions presently utilize 95 MW of grandfathered interconnection rights from the existing NRG Astoria Westinghouse units that will be retired as part of the construction process. The Project is being studied as a Class Year 2011 project. The NYISO has issued its draft Class Year 2011 Facilities Study and concluded that energy from the Project will be fully deliverable. An additional queue position (#266) is a 250 MW interconnection to the Astoria Annex 345 kV system and is being studied in the 2012 Class Year.





Large Generating Facility Data submitted with NRG's interconnection requests for the 345 kV and 138 kV queue positions are attached in Appendix 4.

PLAN AND SCHEDULE

NRG currently has queue positions pending for Phase I of the Project which consist of two 250 MW units of the repowering. The first unit, which holds queue positions #201 and #224 (a/k/a Berrians GT I and GT II) will comprise one, 1-by-1 combined cycle unit that will connect to the Astoria West 138kV location. This unit will utilize the bus position of four existing NRG Astoria Westinghouse GTs of approximately 100 MW that will be demolished just prior to the construction of this unit. The NYISO is targeting finalization of the Class Year cost allocation and deliverability study in June 2013 for the 2011 Class Year.

A second 250 MW unit (Berrians GT III), which holds Queue #266, is being studied in the 2012 Class Year. The second unit is proposed to connect to the new Astoria Annex 345kV substation (Figure 2, above).



Class Year 2012 is in-progress and NYISO has completed a draft Facility Study. Finalization of Class Year 2012 will likely occur in the third or fourth quarter of 2013. Completion of the 2011 and 2012 Class Year studies will provide certainty regarding the project's interconnection costs.

INTERCONNECTION COST

NRG expects to receive the final interconnection cost projections for Queue positions #201 and #224 interconnecting at the Astoria West 138kV substation in the near term.





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FUEL SUPPLY AND INTERCONNECTION



GAS AVAILABILITY AND BACKUP FUEL

Gas availability in New York City for large generators is supplied only on an interruptible basis. On cold winter days when Con Ed experiences pressure drops in the system from heavy residential heating demand, Con Ed will often issue Operational Flow Orders which can price natural gas at a level sufficient to incent generators to switch to back-up fuel sources. In anticipation of potential gas supply



interruptions or price spikes, NRG has two 1.8 million gallon fuel tanks at the Astoria site that currently store kerosene which is the backup fuel for the existing Astoria peaking units. During Project construction, one of these tanks will be converted so that it can store ultra-low sulfur diesel ("ULSD") that will be used as a backup fuel for the Project. Fuel oil is presently delivered to the site by truck and NRG anticipates truck deliveries for ULSD supply as well.

The fuel storage tank can supply enough ULSD for 60 hours of run-time at full load. The air permit for the repowered units allows for 50 hours of run time on ULSD per machine.

COMPONENTS OF FUEL COST

Commodity Gas: Natural gas received at the Project will be priced based on published rates for Transco, Zone 6 N.Y. in Platts' Gas Daily. This price represents the cost of gas delivered to the Citygate and does not represent the full delivered cost of natural gas to the Astoria site, which will include local delivery charges and taxes as described below.



Taxes: Taxes are sometimes assessed to the aforementioned demand, commodity and variable components of fuel cost. Taxes may include gross receipt and sales taxes. Current taxes for delivered gas supply in New York City include:

- Gross Receipts Tax at 2.3683%, and
- Commodity Sales Tax at 4.5%



CONSTRUCTION PLAN

Construction of the Project will take place in two primary phases: 1) preparing the site and removing the existing oil-fired Westinghouse units, and 2) constructing the new CCGT units. NRG will use an Engineering, Procurement and Construction ("EPC") contractor to build the Project. The EPC contractor's scope will include engineering, construction management and procurement for balance of plant equipment for the 138kV and 345kV generator step-up ("GSU") transformers, boiler feed and condensate pumps, auxiliary cooling systems, distributed control system, along with various tanks and bulk materials not provided by the major equipment vendors.

Site preparation and demolition will include removing the seven existing Westinghouse units, GSU transformers, underground fuel oil and electric services, and asphalt. A retaining wall will be constructed and backfilled on the west side of the site to match existing grade. A temporary storage area will be constructed on the North West corner of the site for plant spare parts and spare transformers.

Electrical interconnections will be made using underground and overhead connections. The 138kV transmission line will be run underground to Con Ed's Astoria West substation. The 345kV interconnection will run over head to the NYPA gas insulated substation ("GIS"). The EPC contractor will include construction of these lines in its scope of work.

SUBCONTRACTING PLAN

In addition to NRG personnel, NRG will run competitive processes to select the most qualified subcontractors at competitive prices. NRG will build the Project with a single EPC contractor and NRG will procure the major equipment. The only equipment selections made at this time are the combustion turbines, General Electric 7FA dual-fuel fired combustion turbine generators. At the present time we anticipate that the EPC contractor will procure all remaining equipment.

NRG has not yet selected the EPC contractor for the Project. The Project will only be bid to large, experienced EPC contractors that have built a number of similar projects in New York City. All potential



contractors will perform work utilizing the local construction trades, and will be required to demonstrate extensive experience executing successful projects in the greater New York City area. NRG will require the successful contractor to negotiate and execute a Project Labor Agreement with the affected trades.

While NRG anticipates that the EPC contractor will self-perform much of the work, the EPC contractor will likely subcontract certain specialty portions of the project, including, but not limited to the following:

- Earthwork
- Exhaust Stack
- Duct Work
- Field Erected Tanks
- Piling
- Equipment and Pipe Insulation
- Pre-Engineered Buildings
- Passenger Elevators

- Painting
- Fire Protection
- Electrical Substation
- Underground Transmission
 Interconnections
- Site Services (including third party inspections required under the New York Building Code)

NRG will ensure that all major subcontractors utilized by the EPC contractor are fully qualified to perform their scope of work, are experienced in the local market, and comply with the same requirements for employing the local construction trades as outlined for the EPC contractor. These subcontracting opportunities are likely to provide the best opportunity to involve Minority and Women-Owned Business Enterprises ("M/WBE") in the Project. NRG supports the M/WBE goals set out in Section 14.3 of the RFP.

A project-specific M/WBE program will be established for the Project. This program will include project specific goals for M/WBE participation and will outline planned activities to achieve the targeted goals. This may include the hiring of an M/WBE local coordinator, with the goal of using a professional with established ties to the community, the participation in business to business events, coaching and mentoring programs for contractor's staff, and advertising of opportunities.

NRG is committed to diversity and equal opportunity in the workplace. NRG's Equal Employment Opportunity Commitment Policy is in Appendix 10 and NRG's most recent (September 2012) confidential Equal Employment Opportunity ("EEO") report summary is included as Appendix 10. NRG submits this



data annually to the Equal Employment Opportunity Commission, an agency that collects data about gender and race/ethnicity by types of job groupings. NRG will provide this information in 2013 when the EEO report is updated.

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OPERATIONS AND MAINTENANCE

NRG has a proven track record in power plant operations. NRG is an operations lead organization focused on three key priorities which are listed in order of importance below:

- a fundamental focus on safety;
- minimizing environmental impacts; and
- optimizing fleet-wide maintenance to retain the long-term viability of its facilities and to minimize forced outages.

NRG is proud of its safety performance and has an unrelenting focus on this aspect of our business. Our safety program is supported by a demonstrated management commitment and an expectation of full employee participation.

NRG has achieved a

high level of operational performance through its intensive focus on operations and maintenance fundamentals lead by regionally-coordinated operations teams. The NRG Operations Organization uses multiple tools to continuously improve its safe, plant operations.



Through its experience gained through operating its extensive fleet, NRG has the right experience to operate all sizes of power production facilities. Specifically, NRG operates and maintains a total of 1,300 MW of intermediate and peaking plants in New York City. NRG clearly recognizes the need for emphasis on proper plant operations and maintenance ("O&M"), including the O&M as it pertains to gas turbines. To that end, NRG has placed the gas turbine technology provider in a key role in operations training and management during the development and construction phases, as well as post-completion. NRG will pay critical attention to managing the gas turbine operations and will incorporate close coordination of the technology provider and a best practices approach to overall O&M at the Astoria Repowering Project.

STAFFING

Plant staffing plans for the proposed project have been developed with key skills identified. NRG intends to maintain current staffing levels for the Astoria facility. The positions include plant supervision, mechanical, electrical, instrumentation, operating technicians and support staff. To the greatest possible extent, new positions will be sourced from the local community. Figure 6 is an organizational chart of the proposed plant staffing.





PRE-COMMERCIAL OPERATION DATE

NRG is committed to achieving world-class excellence for its generating fleet. A key step in realizing this goal is the implementation of an extensive training program for all levels of the operations personnel with the guidance of the technology providers. The training program will consist of the following:

- **Classroom Technology Training** A series of classes will be organized covering fundamentals of the combined cycle technology and its operational requirements. The facility will be highly automated so emphasis will be placed on instrumentation and control systems.
- **Computerized Simulator Training** This has proven to be a very effective part of the training program for operators at other NRG facilities and NRG will seek to capitalize on that success for the Project. Consisting of training on a computerized simulator, the actual control consoles for



the proposed combined cycle units will be mirrored, allowing for thorough training through simulation of a wide range of operational situations

Actual Plant Training – NRG works with the gas turbine technology provider to train key
operators at an actual operating facility and provide training during the commissioning and
startup of the project. We view this "hands on" training as essential for selected positions
within the operations organization and enables operators to share best practices across
operating projects ultimately achieving world-class operations results.

EQUIPMENT MAINTENANCE

Equipment maintenance will be performed in accordance with the NRG work management policy. The policy provides guidance on scheduling, planning, and tracking maintenance activities to optimize performance based on Original Equipment Manufacturer ("OEM") recommendations. Planned outages will be scheduled and performed in accordance with the NRG Planned Outage Scheduling and Approval and Outage Management Policies.



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A detailed maintenance plan will be developed which covers the following areas:

- Equipment maintenance intervals This will determine the type, quantity and numbers of spare parts required to be stored and consumed at the plant.
- Spare Parts Inventory Normal stocking levels of spare parts to be warehoused at the facility will be determined. Economic Order Quantities and Re-Order Points for each critical spare part will be determined.
- Staffing requirements (company and contract personnel) A maintenance philosophy will be determined during the early development phase to include any facilities or equipment required for implementing a successful preventive maintenance program.
- **Control Systems and Data Capture** A key to the success of a preventive maintenance program in an advanced facility such as a peaking plant is the identification of the critical data items that



need to be collected and stored from the Distributed Control System. The collection of these data sets from the beginning of operation can facilitate critical trending analysis which can identify potential maintenance and environmental issues before they occur, optimize the frequency of maintenance intervals and number of spare parts kept at the facility, and reduce environmental impact occurrences.

NRG has identified a goal of achieving world-class operating standards and availability in all its generating stations. Implementation of a first-class training program, preventative maintenance plan, and uncompromising safety standards are all crucial components of our goal of ensuring top decile performance from our generating fleet.

PLANNED MAINTENANCE

A gas turbine facility's maintenance intervals are based on a combination of factors that include fuel type, number of operating hours, number of starts, types of starts, whether operation or starts were performed using a single or dual fuel and the number of trips from load. These factors are used to calculate equivalent hours which determine the type and interval of the level of inspection. Maintenance intervals vary among gas turbine suppliers as well as the current design limitations. NRG works closely with the OEM and industry experts when completing inspections, outages and equipment upgrades.

The expected gas turbine availability varies on an annual basis due to the type of planned maintenance activities which differ in length. NRG has taken steps to aggressively leverage its organizational knowledge in redesign, implementation and operation of the Project, to ensure world-class status. NRG has obtained extensive knowledge in completing these types of projects from Cedar Bayou in Texas to El Segundo in California. This experience will help the Project, its technology provider and the EPC vendor to effectively address issues associated with performance of the entire facility.



Maintenance for the steam turbine, HRSG, cooling system and balance of plant will be conducted in accordance with OEM recommendations and will be planned in advance according to NYISO planned outage protocols. NRG has provided an expected maintenance interval schedule in Attachment 2 to the RFP (see RFP Data Attachments).



ENVIRONMENTAL BENEFITS AND PERMITTING

NRG began the air permitting process for the Project in December 2007 with the New York Department of Environmental Conservation ("DEC"). During the permitting process, NRG worked with local environmental groups and local stakeholders to develop the project in a way that would reduce annual emissions. The Project received strong public support from local environmental groups and local stakeholders, and was awarded its full air permit in October 2010 from the DEC (Appendix 3).

The DEC awarded the permit for the fully repowered site—four 1x1 dual-fuel capable CCGT units totaling 1,040 MW. The permit allows the Project to be completed in the planned two phases, with each phase retiring a portion of existing generation and replacing it with two 1x1 dual-fuel CCGT units. This proposal offers Phase 1 only.

The Project has already obtained all major regulatory approvals and permits for the construction of this project (<u>http://www.dec.ny.gov/permits/54633.html</u>) including:

- The DEC issued a Final Environmental Impact Statement for the Project.
- The DEC issued a complete and final Title V Air Permit and Title IV Acid Rain Permit for the Project.
- The DEC issued a complete and final Industrial State Pollutant Discharge Elimination System Permit issued for the Project.
- The Federal Aviation Authority issued Determinations of No Hazard to Air Navigation with respect to the Project's proposed stacks.

NRG filed a petition requesting a New York State Certificate of Public Convenience and Necessity ("CPCN") with the PSC on April 26, 2010 (CASE 10-E-0197). The PSC issued an order granting the CPCN on January 24, 2011 (see attached Appendix 3).

Since the Project received its final air permit in December 2010, the EPA has begun requiring permit review for greenhouse gas ("GHG") emission rates. NRG has presented the required GHG emissions



data to DEC to complete that minor modification to the existing air permit. DEC must approve the inclusion of the GHG limits in the Title V air permit before the Project can begin construction.

ENVIRONMENTAL BENEFITS

The Project will use emissions control technologies that will allow safe compliance with current permit limits during operation of the facility. Emissions control technology and management strategy will include the following:

- conventional SCR that will control more than 90% of NOx and that will provide a 2-3 ppm discharge rate for NOx emissions to the atmosphere;
- catalytic oxidation that will reduce carbon monoxide emissions;
- water injection for control of NOx and combustion by-products during fuel oil firing;
- use of prompt start and fast ramp procedures to minimize the startup/shutdown emissions from the units;
- turbines equipped with software technology that will reduce emissions at lower operating levels, in turn reducing emissions on system shutdown; and
- use of natural gas as the primary fuel and ultra-low sulfur fuel oil (<0.0015% sulfur by weight) as backup during gas curtailments, minimizing sulfate, fine particulate, and sulfuric acid formation.

The Project will realize significant local emissions reductions when compared to the operation of the units today. Permitted emissions levels for the Project (Phase 1 of the fully repowered site) will reduce the annual NOx output at the facility by more than 65%. PM emissions will be reduced at the site annually by 45%.

PERMITTING PLAN AND SCHEDULE

NRG will initiate a modification to the existing Title V permit to incorporate the GHG emission requirements as required by the U.S. Environmental Protection Agency's GHG Tailoring Rule ("EPA GHG Tailoring Rule") and the DEC's CO2 Performance standards for Major Electric Generating Facilities - 6NYCRR Part 251 (Part 251). NRG has also agreed, at DEC's request, to revise the netting analysis done at the time of permit application to reflect the date that the permit application was deemed complete.



These requirements were not applicable at the time the previous Title V permit was issued in October 2010.

In order to modify the Title V permit, NRG must complete a GHG Best Available Control Technology analysis pursuant to the EPA GHG Tailoring Rule and develop emission limits for the combustion turbine. The basis for the proposed permit limits will be modeled after the recently approved (DEC and USEPA) analysis conducted for the Cricket Valley Energy Center. Additionally, to comply with Part 251, NRG must select an output-based limit or input-based CO2 limit for inclusion in the Title V permit. The CCGT already permitted for the Astoria Repowering Project will meet either limit specified in Part 251.

Once these analyses are complete, NRG will submit them as part of the Title V permit modification. When the DEC determines the application is complete the agency will issue the draft permit modification for public notice and comment. NRG expects that the final renewed Title V permit will be issued by October 2013. THIS PAGE INTENTIONALLY LEFT BLANK



COMMUNITY BENEFITS AND SUPPORT

The Project provides unparalleled benefits to the local Queens and broader New York City host communities. The unanimous support for the Project across all spectrums of stakeholders demonstrates the Project's value to the downstate area. The Project provides real annual emissions reductions at the site of up to 65% of NOx, SO2 and PM, providing an immediate air quality impact for all New York City residents. Additional ratepayer benefits include annual reductions totaling \$294 million per year and \$2.4 billion over the 10 year study period.

CONFORMITY WITH NEW YORK ENERGY HIGHWAY BLUEPRINT

NRG has a long established commitment to sensible, sustainable development and launched its fleetwide repowering initiative in 2006. NRG believes the beneficial reuse of existing generating facilities through repowering provides a number of benefits, including: significant air quality improvements, economic support to host communities, and reduction in the overall cost to consumers through the reuse of existing site infrastructure and brownfield industrial property. NRG's development philosophy is demonstrated by the projects we are actively pursuing. From the repowering of El Segundo and Marsh Landing in California to the development of Dunkirk, Bowline and Astoria in New York, NRG is committed to the repowering philosophy across its fleet.

This philosophy has gained significant attention in New York with Governor Cuomo's recommendations in the New York Energy Highway Blueprint ("Blueprint"). NRG applauds Governor Cuomo in his pursuit of a detailed planning process to design the next generation energy backbone for New York. The Project is capable of achieving a number of the stated objectives identified in the Blueprint.

PLAN FOR POSSIBLE POWER PLANT RETIREMENTS

With the proposed retirement or mothball of several generating units in New York City, and the evaluation of reliability needs in the event of an Indian Point retirement, the Project is uniquely suited to satisfy the needs of the most congested market in the country. The Project is the only fully permitted CCGT unit in New York City and has the ability to deliver to the 138 kV and 345 kV systems – the two major transmission backbones in the City.



SUPPORT REPOWERING OF EXISTING POWER PLANTS TO IMPROVE EFFICIENCY AND PROTECT THE ENVIRONMENT As discussed previously, NRG believes repowering existing facilities is the most economical and environmentally sensible option for new generation projects. In constrained markets like New York City, the need for repowering is even greater. The Project is able to deliver increased megawatt density where New York City needs it most while <u>reducing</u> annual emissions on-site up to 65% and peak day emissions up to 95%.

The Project will be the first of its generation to demonstrate how to repower constrained sites with new, state-of-the-art generation while providing unparalleled emissions benefits to New York City. The Blueprint recommendation echoes the 2009 New York State Energy Plan which referenced the NRG repowering concept:

Repowering of existing power plants under the right circumstances can provide environmental and economic benefits. For example, **NRG has proposed repowering of its Astoria facility in New York City** and has estimated that the repowering would result in a reduction of annual onsite air emissions of over 75 percent for NOx and CO and over 50 percent for particulate matter, while simultaneously increasing power output by over 70 percent.

EMISSIONS BENEFITS

NRG has worked closely with State, City and local officials and environmental advocacy groups throughout the development process to design a project that can deliver real emissions benefits to the Astoria and broader New York City community. NRG established a model of brownfield and infrastructure re-use that has been recognized by both New York State's energy plan and New York City's PlaNYC.

One of the many advantages of the Project is its remarkably favorable environmental characteristics. Although the Project will operate many more hours per year than the retiring generation, the Project will still reduce the annual NOx output at NRG's site by more than 65% and reduce annual PM emission by 45%. Additionally, based on historic emissions city-wide, the inauguration of this Project would contribute to city-wide emission reductions up to 8% from the power sector, helping further the New York City's PlaNYC goals and the New York State's Energy Highway Blueprint goals.



RATEPAYER AND ECONOMIC BENEFITS

An independent analysis of the benefits of the Project was recently conducted by Longwood Energy Group, identifying the economic and ratepayer impacts of the Project over the first 10 years of operations. Over the study period, the Project was found to provide \$2.8 billion of ratepayer benefits across New York, and an additional \$312 million per year in induced economic activity state-wide. The study has been attached in Appendix 7 with detailed discussion on the study methodology and input assumptions.

	New York City	Total New York State
Energy Market Savings		
Annual	\$278 million/year	\$413 million/year
10-Year Total	\$1.8 billion	\$2.9billion
Macroeconomic Benefits		
Gross Regional Product, 10 Years Operations	+ \$207 million/year	+ \$312 million/year
Total Jobs During Construction	+ 484 on average	+ 695 on average
Total Jobs During 10 Years Operations	+ 1,800/year on average	+ 3,070/year on average
Table 3 - Astoria Repowering Economic Benefits		

According to the study, the Project will lower wholesale electric prices by displacing higher-cost generation in New York City. Over the 10 years covered by the analysis, wholesale energy prices in New York City will be an average of \$1.26/MWh lower with the Project, producing annual savings of \$144 million across the State.





New York City Wholesale Electric Energy Price Decrease Due to Repowering Astoria

Another important measure of cost savings is the production cost. Production cost is the generators' cost to produce electricity including variable items such as fuel and emissions, and some operations and maintenance costs. The Longwood Energy Group analysis found that average production savings would be \$22 million each year, totaling more than \$225 million over the 10-year study period.

Further benefits of the Project relate to the cumulative economic impact to the local and state economy through the creation of economic activity. During the construction phase, the project will generate more than 695 jobs per year, most of which will be in the New York City area. The greatest economic impact occurs during the operations phase of the Project. The total state-wide employment benefit averages 3,070 jobs per year over the study term, the majority of which will be the New York City area. These impacts are largely related to the significant ratepayer savings realized when the Project begins commercial operations.

Figure 7 - Wholesale Energy Price Decrease




Jobs Resulting from Astoria Repowering

COMMUNITY SUPPORT

The greater Queens, New York Community strongly supports the Project. Every federal, state and city elected official supports this project along with area environmental, labor, business and civic organizations.

Beginning in 2007, the Queens community and NRG worked cooperatively through the permitting process. NRG incorporated suggestions from the community into the project and embodied those suggestions into the air permit. The result – this project received unanimous support for both the air permit and CPCN. During the final public hearing administered by the State Department of Environmental Conservation, the public hearing officer remarked that in all of his years holding hearings, this was the first time where no one from the public made either verbal or written comments in opposition to a generation project located in New York City. In fact, we had unanimous, vocal and enthusiastic support for the Project and the benefits it will bring to the community.



Since that time, NRG has continued to maintain a regular presence in the Queens Community, where we are currently the operator of the existing Astoria Gas Turbines facility. Many of our employees are from Queens and the Greater New York City Area. We have come to be recognized and involved members of the community. After Superstorm Sandy, NRG's employees continued to operate the Astoria Gas Turbines facility, which ran flawlessly before, during and after the storm, providing New York City with needed electricity. Moreover, our employees volunteered with clean up and restoration efforts both in Queens and on Staten Island.

In April 2012, business, labor, health, environmental groups and community organizations joined state and local elected officials in Queens to launch the *Smart Power NY* coalition. Since its formation, the coalition has continued to grow support for the repowering of NRG Energy's Astoria Generation Plant in Astoria, Queens.

Chaired by New York Assemblywoman Aravella Simotas, *Smart Power NY* includes local, state and federal elected officials, environmental and health groups, as well as civic and business organizations.

- U.S. Representative Carolyn Maloney
- U.S. Representative Joseph Crowley
- State Senator Michael Gianaris
- State Senator José Peralta
- Assemblywoman Aravella Simotas, Chair
- City Council Speaker Christine C. Quinn
- City Councilor Peter Vallone, Jr.
- City Councilor James Gennaro
- Queens Borough President Helen Marshall
- American Lung Association in New York

- Building and Construction Trades Council of Greater New York
- Coalition Helping Organize a Kleaner Environment (CHOKE)
- League of Conservation Voters
- Mount Sinai Queens
- Natural Resources Defense Council
- Queens Chamber of Commerce
- Regional Plan Association
- United Community Civic Association

Information on the coalition is available at <u>www.smartpowerny.org</u>.

Inquiry No. Q13-5441LW Astoria Repowering Project





Figure 9 - Smart Power NY event in New York City

Most of these groups have been supporters since NRG began outreach for the Project. NRG will continue to work with local stakeholders to minimize impacts on the local community throughout the construction and operations phase of the Project. It was this collaborative effort between the community and NRG that has created a project with such rare and enthusiastic support.

Following are several support letters from local elected officials, environmental advocacy groups and local health providers that support the redevelopment efforts proposed in the Astoria Repowering Project and the unparalleled returns they deliver to the residents of New York City.



LETTERS OF SUPPORT



BOARD OF DIRECTORS

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Mr. Gil C. Quiniones President and Chief Executive Officer New York Power Authority 123 Main Street White Plains, NY 10601-3170

Dear Mr. Quiniones:

The New York League of Conservation Voters supports the repowering of NRG's Astoria Generation facility. The League has been an outspoken proponent of repowering older facilities with clean, environmentally friendly technologies. We support the NRG project as it will truly help to bring real emissions reductions to the New York City area.

In brief, the NRG project would:

·Reduce onsite "peak day" emissions by 98 percent; •Displace less efficient units, reducing greenhouse gas emissions by 1,000,000 tons each year, the equivalent of removing 185,000 cars from New York City's roads; ·Increase generating efficiency by 56 percent; and

·Replace older technology units with new, efficient technology.

Last year, the League joined City Council Speaker Christine Quinn, the American Lung Association and Mt. Sinai Hospital Queens in joining the Smart Power NY Coalition, which includes elected officials, civic and business groups, as well as other environmental organizations. All of these varied interests support the NRG Astoria Repowering project because of the many benefits this proposal brings to New York.

We fully support NYPA proceeding with this worthwhile project and hope that you will award this project a contract.

Please feel free to contact me directly with any questions you may have.

Sincerely,

Mura Bysty

Marcia Bystryn

President

HEADQUARTERS 30 Broad Street, 30th Floor | New York, NY 10004 T 212.361.6350 F 212.361.6363 WWW.NYLCV.ORG info@nylcv.org

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smart power NY

Assemblywoman Aravella Simotas, Chair

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City Council Speaker Christine C. Quinn

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American Lung Association in New York

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Mount Sinai Queens

Natural Resources Defense Council

New York League of Conservation Voters

NRG Energy, Inc.

Queens Chamber of Commerce

Regional Plan Association

United Community Civic Association

www.SmartPowerNY.org

Mr. Gil C. Quiniones President and Chief Executive Officer New York Power Authority 123 Main Street White Plains, NY 10601-3170

Dear Mr. Quiniones:

As chair of Smart Power NY, I write to urge your support of repowering energy plants in Western Queens. Smart Power NY is a coalition of business, labor, and environmental groups along with local and state elected officials who are advocating for access to safe and reliable sources of power, a reduction in carbon emissions, job creation, and policies that will help New Yorkers save on their power bills.

May 8, 2013

The NRG Astoria Generation Plant repowering proposal is an exemplary project. In addition to being part of a viable replacement plan for the Indian Point facility, there are many benefits to re-powering the Astoria plant including jobs, lower energy costs, and the environment. Furthermore, this is not just a local project in Queens; every city resident stands to benefit from the Astoria Re-powering Project. Not only will it help improve the air quality in all five boroughs, it will create a new, more efficient and reliable source of energy for the city and provide hundreds of jobs at zero expense to taxpayers.

This project enjoys widespread support from business, labor, environmental groups, local, state, and federal elected officials and community members. The New York State Public Service Commission and Department of Environmental Conservation have already granted permits for the project, which will:

•Put 500 New Yorkers to work for three years building the plant;

- •Reduce onsite "peak day" emissions by 98 percent;
- •Displace less efficient units, reducing greenhouse gas emissions by 1,000,000 tons each year, the equivalent of removing 185,000 cars from New York City's roads;
- •Increase generating efficiency by 56 percent;
- •Replace older technology units with new, efficient technology; and

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Assemblywoman Aravella Simotas, Chair

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Natural Resources Defense Council

New York League of Conservation Voters

NRG Energy, Inc.

Queens Chamber of Commerce

Regional Plan Association

United Community Civic Association

www.SmartPowerNY.org

•Help meet the electricity needs of New York's growth with more generating capacity—enough to power 320,000 homes.

Ultimately, re-powering the Astoria plant will provide cleaner, more reliable and efficient power in Queens and for all of New York City, all while leveraging private investment only—no taxpayer or ratepayer funds will be used.

Given the great benefits that my constituents and all New Yorkers stand to gain, I strongly urge you to join us in supporting this critical project.

Sincerely,

Quanella Simotos

Aravella Simotas New York State Assemblymember



JOSEPH CROWLEY 14TH DISTRICT, NEW YORK

VICE CHAIR, HOUSE DEMOCRATIC CAUCUS

Congress of the United States House of Representatives

COMMITTEE ON WAYS AND MEANS WEB PAGE http://www.crowley.house.gov

Washington, DC 20515–3214

May 15, 2013

Mr. Gil C. Quiniones President and Chief Executive Officer New York Power Authority 123 Main Street White Plains, NY 10601-3170

Dear Mr. Quiniones:

As a member of Smart Power NY, a coalition dedicated to bringing safe and reliable sources of power to New York, I write to urge your support of repowering energy plants in Western Queens - specifically the NRG Energy Astoria Repowering Project.

This proposal is an exemplary project. In addition to being part of a viable replacement plan for the Indian Point facility, there are many benefits to repowering the Astoria plant including job creation, lower energy costs, and fewer emissions. Not only will it help improve the air quality in all five boroughs, it will create a new, more efficient and reliable source of energy for the city and provide hundreds of jobs at zero expense to taxpayers.

This project enjoys widespread support from business, labor and environmental groups as well as elected officials and community members. The New York State Public Service Commission and Department of Environmental Conservation have already granted permits for the project, which will:

•Put 500 New Yorkers to work for three years building the plant

•Reduce onsite "peak day" emissions by 98 percent

•Displace less efficient units, reducing greenhouse gas emissions by 1,000,000 tons each year, the equivalent of removing 185,000 cars from New York City's roads

•Increase generating efficiency by 56 percent

•Replace older technology units with new, efficient technology

•Help meet the electricity needs of New York's growth with more generating capacity—enough to power 320,000 homes

Given the great benefits that my constituents and the rest of New Yorkers stand to gain, I strongly urge you to join us in supporting this vitally important project.

Sincerely,

Joseph Crowley (NY-14) Member of Congress

WASHINGTON OFFICE: 1436 LONGWORTH HOUSE OFFICE BUILDING WASHINGTON, DC 20515 (202) 225-3965 OUEENS OFFICE: 82–11 37th Avenue, Suite 402 Jackson Heights, NY 11372 (718) 779–1400 BRONX OFFICE: 2800 BRUCKNER BLVD., SUITE 201 BRONX, NY 10465 (718) 931-1400



Judy Trilivas, RN, MA, CCM Vice President and Chief Operating Officer



Mount Sinai Queens 25-10 30th Avenue Long Island City, NY 11102 Phone 718-267-4384 Fax 718-278-1786

Mr. Gil C. Quiniones President and Chief Executive Officer New York Power Authority 123 Main Street White Plains, NY 10601-3170

Dear Mr. Quiniones:

As a member Smart Power NY coalition, I write to ask you to support the repowering of the NRG Astoria facility in Queens. Smart Power NY is a coalition of business, labor, and environmental groups along with local and state elected officials who are advocating for access to safe and reliable sources of power, a reduction in carbon emissions, job creation, and policies that will help New Yorkers save on their power bills.

The NRG Astoria Generation Plant repowering proposal is an exemplary project. In addition to being part of a viable replacement plan for the Indian Point facility, there are many benefits to re-powering the Astoria plant including jobs, lower energy costs, and the environment. Furthermore, this is not just a local project in Queens; every city resident stands to benefit from the Astoria Re-powering Project. Not only will it help improve the air quality in all five boroughs, it will create a new, more efficient and reliable source of energy for the city and provide hundreds of jobs at zero expense to taxpayers.

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Increase generating efficiency by 56 percent;

·Replace older technology units with new, efficient technology; and

 Help meet the electricity needs of New York's growth with more generating capacity—enough to power 320,000 homes.

Again, I ask you to support this very important project. Should you have any questions or if you would like to discuss further, please contact me at 718 267-4384 or by email at judy.trilivas@mountsinai.org.

Sincerely yours,

Aulivas dy Trilivas