



County Line Wind

Response to Request for Proposal for Long Term Contracts for Clean Energy Projects

Submitted to:

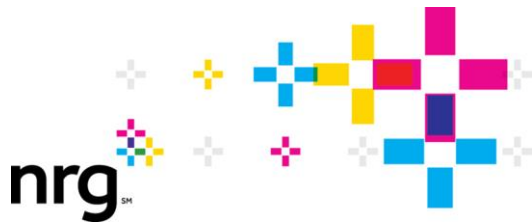
Massachusetts Department of Energy Resources

July 27, 2017

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GreenMountain Wind, LLC known as the County Line Wind Project is ("County Line"), a subsidiary of NRG Energy, Inc. ("NRG" or "NRG Energy"), appreciates the opportunity to respond to the request for proposal issued by the Massachusetts Department of Energy Resources ("DOER") for clean energy projects pursuant to Section 83D of Chapter 169 of the Acts of 2008 as amended by Chapter 188 of the Acts of 2016, An Act to Promote Energy Diversity.

County Line is a proposed wind energy facility with a current operating capacity of 630 megawatts ("MW") located between Penobscot and Aroostook Counties in central Maine. County Line has partnered with the Maine Power Express, LLC ("MPX") and Con Edison Transmission, Inc. ("CET") to deliver its output over the Maine Power Express, a 1040MW High Voltage Direct Current ("HVDC") transmission line ("MPX Project"), underground and underwater, direct to Boston, MA. The combination of this bid presenting a large scale renewable energy facility and highly efficient scalable transmission solution delivers unprecedented value to Massachusetts utilities and its ratepayers.

NRG is a Fortune 200 company and one of the largest independent power producers in the U.S. with approximately 50,000 MW in generation. NRG Energy's commitment to help America transition to a clean energy economy is showcased via NRG Renew, the company's renewable energy development and operation platform. Renew's operating portfolio of nearly 5,000 MW of solar and wind generation make NRG the third-largest, U.S.-based renewable energy generator. This portfolio is made up of 35 wind farms, 16 utility-scale solar facilities, and hundreds of distributed solar facilities. The Renew platform carries an expertise in the full project lifecycle, as it develops, constructs, finances, owns and operates solar and wind assets, both onsite and utility-scale.

The following proposal presents a highly efficient renewable energy resource in partnership with a large scale transmission solution and will deliver unprecedented value to the utilities of the Commonwealth and its ratepayers. NRG's experience, development platform, supply chain, and capital to execute on our commitments, so that the Soliciting Parties can fully capture the intended environmental, financial, and reliability benefits of their procurement.

NRG looks forward to serving the electricity needs of the Commonwealth. If DOER has any questions regarding this response, please do not hesitate to contact me at benjamin.fairbanks@nrg.com.

Sincerely,

Benjamin Fairbanks, NRG Renew

Explanation of Proposal

This proposal, presented by NRG, is for discussion purposes only. Notwithstanding anything to the contrary in any Request for Proposal or other communication between the prospective customer or customer's representative and NRG, this Proposal is on the terms and conditions set forth in the final contract. Any failure by NRG to state herein our exceptions to the Proposal or other communications does not constitute our unqualified acceptance of all or any terms and conditions and/or documents comprising the Proposal.

Any pricing contained herein is indicative only and is subject to change until, if ever, a definitive agreement is executed. This proposal is not intended to create a binding or enforceable contract or commitment and may not be relied upon by either party as a basis for a contract by estoppel or otherwise. This proposal is being furnished to you pursuant to your request. This proposal is subject to, in all respects, our obtaining all requisite approvals and consents from all interested parties necessary to consummate the proposed transaction.

This proposal meets the definition of Bid Category IV: "Clean Energy Generation from Incremental Hydropower Generation and/or New Class I RPS Eligible Resource with Class I RECs and/or Environmental Attributes via Long Term Contract with a Transmission Project under FERC Tariff."

The "Clean Energy Generation from New Class I RPS Eligible Resources with Class I RECs" is proposed by NRG. The proposed "Transmission Project under FERC Tariff" is owned by Maine Power Express, LLC with development support from Con Edison Transmission, Inc. Per the terms of the RFP, a transmission proponent is not an "Eligible Bidder" per se. (RFP Section 2.2.1.1 Eligible Bidder: "An eligible bidder is the owner of Clean Energy Generation or is in possession of the development rights to Clean Energy Generation.") Maine Power Express is neither the owner of, nor possesses the development rights to, Clean Energy Generation. However, Maine Power Express and NRG have executed a Memorandum of Understanding and is submitting a draft Term Sheet for a Transmission Service Agreement for this proposal. Therefore, in order to provide the evaluation team with sufficient information necessary for the full evaluation of the proposal, Maine Power Express will respond to certain information requests in this RFP from the perspective of an "Eligible Bidder."

The format of this RFP response will proceed as:

Request #.#

County Line Project – Response and/or **CLW Attachment** #.#

MPX Project – Response and/or **MPX Attachment** #.#

For instances when the same or similar information is requested more than once, a complete response will be repeated in the event sections of the proposal are delegated to separate evaluators. While this results in a longer filing and repeated attachments, we believe it will benefit the evaluator to not have to refer to other sections for a complete response.

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1. Certification, Project, and Pricing Data

The Certification, Project and Pricing Data ("CPPD") document is attached with this proposal.

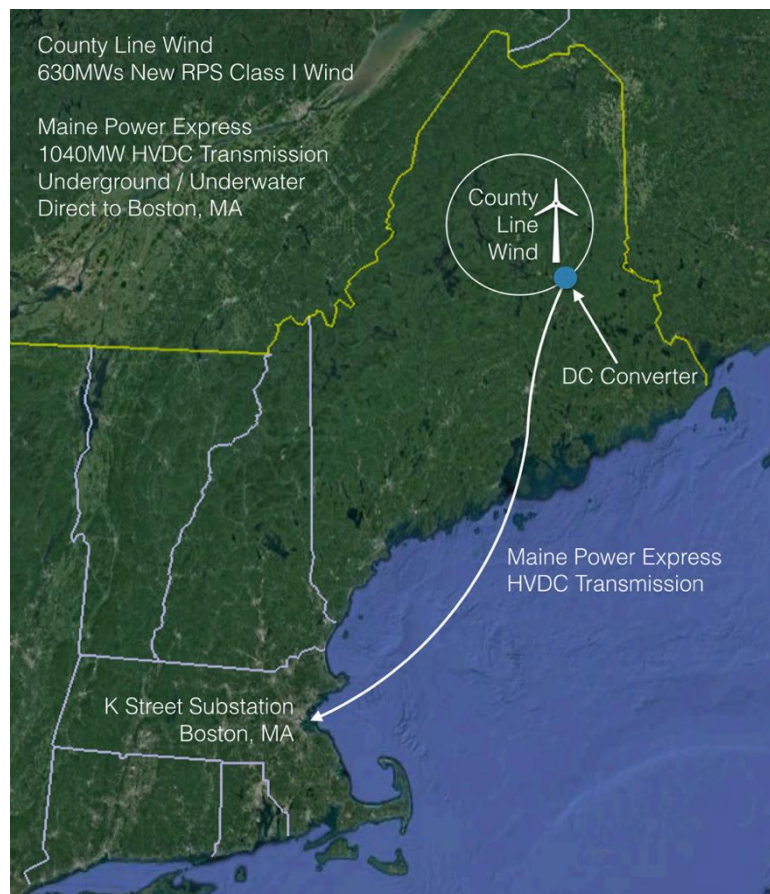
Please see **CONFIDENTIAL CL Attachment 1**.

2. Executive Summary of the Proposal

GreenMountain Wind, LLC known as the County Line Wind Project is ("County Line" or "Project"), a subsidiary of NRG Energy, Inc. ("NRG" or "NRG Energy") [1], appreciates the opportunity to respond to the request for proposal issued by the Massachusetts Department of Energy Resources ("DOER") for clean energy projects pursuant to Section 83D of Chapter 169 of the Acts of 2008 as amended by Chapter 188 of the Acts of 2016, An Act to Promote Energy Diversity.

County Line is a proposed wind energy facility with a current operating capacity of 630 megawatts ("MW") located between Penobscot and Aroostook Counties in central Maine. County Line has partnered with the Maine Power Express, LLC ("MPX, LLC") and Con Edison Transmission, Inc. ("CET") (together, "MPX") to deliver its output over the Maine Power Express, a 1,040 MW High Voltage Direct Current ("HVDC") transmission infrastructure project ("MPX Project"), underground and underwater, direct to Boston, MA. The combination of this bid, presenting a large scale renewable energy facility and a highly efficient scalable transmission solution, delivers unprecedented value to the utilities of the Commonwealth and its customers.

This proposal meets the definition of Bid Category II: "Clean Energy Generation from New Class I RPS Eligible Resources via Long Term Contract" and is consistent with the eligibility criteria set forth in the RFP.



Experience and Viability

The following proposal brings together two energy giants delivering unquestioned experience and viability.

About NRG

NRG is the largest independent power producer in the U.S. NRG's approximately 50,000 MW-portfolio includes 137 conventional generation plants in 24 states. Additionally, NRG is the largest deregulated energy retailer nationwide, serving nearly 2.5 million metered locations. NRG has nearly 3 million recurring customers and satisfied 42 TWh in retail obligations in 2016.

NRG Energy's commitment to help America transition to a clean energy economy is showcased via NRG Renew, the company's renewable energy development and operation platform. Renew's operating portfolio of nearly 5,000 MW of solar and wind generation make NRG the third-largest, U.S.-based renewable energy generator. This portfolio is made up of 35 wind farms, 16 utility-scale solar facilities, and hundreds of distributed solar facilities. The Renew platform carries an expertise in the full project lifecycle, as it develops, constructs, finances, owns and operates solar and wind assets, both onsite and utility-scale.

NRG has extensive experience in designing, financing, and installing commercial and utility-scale renewable energy projects having closed billions in project financings. This includes a combination of corporate/sponsor equity, tax equity, and long-term debt. NRG's financial standing, detailed below, shows our ability to finance projects.



Lastly, NRG is no stranger to working with the Commonwealth or with the Soliciting Parties as it has a sizeable footprint in the region. NRG has strong relationships with nearly all the distribution utilities in the state, which has enabled us to successfully execute complex projects in a timely manner. Currently, NRG operates two conventional generation facilities totaling 1,126 MW, as well as a large portfolio of renewable energy projects totaling 111 MW dc among 57 sites in various stages of development, construction and operation, including the largest community solar facility in the country. The Company is providing renewable energy for thousands of residential, municipal and commercial customers including Raytheon, Tufts University and Whole Foods.

About the Maine Power Express Team

Maine Power Express, LLC is a Joint venture between Loring Holdings, LLC (████), National Resources Energy, LLC (████) and Transmission Developers, Inc. (████). MPX, LLC has

assembled an expert team of development and strategic partners to design, engineer, permit, finance, construct and operate the MPX Project.

Con Edison Transmission CET is the funding development partner and anticipated owner and operator of the MPX Project¹. CET is a successful developer of transmission projects. CET is the largest partner and currently holds the leadership role within the New York Transco, the electric transmission partnership that includes National Grid, Avangrid, and Fortis. CET has developed successful bids for public policy solicitations. CET constructed and contributed two of the partnership's three projects, both of which began operation. CET is providing on-going O&M services for projects in operation. CET are well positioned with regulators, other utilities, ISOs and policy organizations to identify market and policy needs and to propose new projects. CET is a wholly owned subsidiary of Consolidated Edison, Inc.

For more than 195 years, Consolidated Edison, Inc. has served the world's most dynamic and demanding marketplace - metropolitan New York. Con Edison, Inc.², is incorporated in New York State and is a holding company that owns all of the outstanding common stock of Consolidated Edison Company of New York, Inc. ("CECONY"), Orange and Rockland Utilities, Inc. ("O&R"), Clean Energy Businesses ("CEBs") and CET, which was formed in 2014 to invest in electric transmission and gas pipelines.

As one of the largest electric companies in the country and the parent of NYC's local utility, Con Edison possesses unique experience. Indeed, the Con Edison companies are leaders in their specific sectors of the energy businesses. As the electric utility responsible for reliably providing electric service to more than three million customers in NYC, CECONY understands and has had responsibility for designing and managing the electric grid in NYC for over 130 years. CECONY also has experience in managing programs and aggregate solutions to meet various public policy goals. Con Edison Energy ("CEE") is a leading third-party energy manager with extensive experience in procuring and delivering renewable power, including in-depth experience scheduling energy and/or capacity on the Hudson Transmission Line (NJ to NYC), Neptune Cable (PJM to LI), and Cross-Sound Cable (ISO-NE to LI). Con Edison Development ("CED") is the fifth largest developer of solar power and a developer of other utility scale renewables, and Con Edison Solutions ("CES") is an experienced developer of distributed renewables, energy efficiency and demand side management solutions.

Consolidated Edison, Inc. is one of the largest utilities in America and one of the longest standing utilities in the country with a proud history dating back to 1823. Consolidated Edison, Inc. financial highlights include the following:

¹ The term "MPX Project" refers specifically to the transmission line. The term "MPX" refers to MPX, LLC and CET as the Joint Development team.

² The term "Con Edison" references Consolidated Edison Inc., the Holding Company and/or all affiliated companies. "CET" refers specifically to Con Edison Transmission, Inc. and its affiliates.

- Annual operating revenues of more than \$12 billion
- Annual net income of \$1.2 billion
- Total assets of more than \$48 billion
- Shareholder equity (GAAP) of more than \$14 billion
- As of December 31, 2016 approximately \$ 33 billion in debt and an enterprise value of more than \$58 billion
- CEI's long-term credit is rated A3, BBB+ and BBB+ by Moody's, S&P, and Fitch, respectively
- Market capitalization of approximately \$25.3 billion as of July 24, 2017

Con Edison is one of the best rated utility companies in the United States. While MPX proposes a project finance structure, Con Edison has the ability to finance the renewable solutions presented herein as part of its ongoing business.

Project Overview

In this proposal, County Line Wind is offering 630MW from a proposed wind energy facility delivered over the Maine Power Express's 1,040 MW HVDC transmission line.

About County Line Wind

The County Line Wind project is located in both Aroostook and Penobscot County, Maine. The Project will be composed of one –hundred and fifty Vestas V150 4.2 MW ("Vestas V150") wind turbines, associated access roads, collection system, generator transmission line and a facility substation and step-up transformer.

County Line Wind has been identified as one of the most attractive sites in the north central Maine for its combination of scale and quality of wind resource. More information on the wind data is provided in Section 4. Wind resource assessments indicate an annual production of [REDACTED].

County Line Wind is appropriately sited for wind development; specifically, the Project area is within an expedited wind permitting zone established by statute to direct wind development to specific areas of the State of Maine. The Project is located on a large tracts owned for timber production. The forest management operations have created a system of logging roads that will be used to the greatest extent possible in developing the Project.

County Line Wind is in the advanced stages of project development and is well positioned to deliver renewable energy for the following reasons:

- The Project will qualify as RPS Class I renewable energy resource.
- The Project meets the minimum contract size of 20 MW and delivered energy from the Project will be incremental to ISO New England ("ISO-NE") via the construction of a new generating unit.

- County Line has secured over 110,000 acres of private land for the construction of wind turbines and ancillary project facilities including all necessary land to the point of interconnection to MPX.
- The Project will utilize technically and commercially viable wind turbine technology.
- The Project is offered under a combined bid that includes the purchase and sale of qualified clean energy and a transmission project that is necessary to deliver this clean energy to the Soliciting Parties.
- A conforming bid for energy and RECs, not exceeding 20 years
- The Delivery Point will be a node on the ISO-NE Pooled Transmission Facilities.
- NRG Energy has developed and financed projects of similar size and scope, and maintains supply chain partnerships to implement County Line Wind.
- NRG Energy has financial capacity in place for the development of the Project and the required security.
- A redline of non-material changes to the Form Power Purchase Agreement ("PPA") is provided.
- The Proposal Certification Form (**CONFIDENTIAL CL Attachment 2**) is authorized by an Officer of NRG Energy.

About the Maine Power Express Project

The MPX Project is an HVDC project under development by Maine Power Express, LLC and Con Edison Transmission, Inc. (together, "MPX"). The MPX Project includes:

- A 1,040 MW (\pm 320kV) AC/DC Converter Station in Southern Aroostook County, ME
- A 103-mile underground HVDC transmission line, buried in an existing energy corridor to Searsport, ME
- A 200-mile submarine HVDC transmission line, under the ocean to Boston, MA
- A DC/AC Converter Station at the east end of Massport Conley Terminal
- A 1.5-mile 345kV AC transmission line buried between the Converter Station and the existing 345kV K Street Substation in Downtown Boston, MA
- ISO-NE Queue position #506 with Draft System Impact Study issued

The MPX Project is the optimal route for connecting stranded wind resources in Northern Maine directly to the Boston load center with minimal environmental impact. The MPX Project does not require unsightly transmission towers, utilizes an existing energy corridor, avoids the taking and clearing of lands and has no adverse impact to the marine environment.

The MPX Project provides access to both superior domestic (Maine) Class I RPS wind resources as well as existing Canadian and Maine hydro via an interconnection with an existing transmission line. By creating access to these transmission constrained renewables, more resources will be made available to consumers in Massachusetts.

The MPX Project is an advanced development project with high viability to reaching commercial operation. Nearly 100% of the land-based real estate is under control. The MPX Project will utilize a long-existing energy infrastructure corridor that is far narrower than most electric transmission lines require and is therefore unlikely to create opposition to development. Further, the entire length of the line is to be buried either underground or under the ocean floor.

Importantly, MPX also has a favorable ISO-NE Queue position, and a Draft System Impact Study, for its interconnection to the K Street substation in Boston, MA.

We expect that the MPX Project will demonstrate clear and obvious “green” benefits to Boston and the population of Massachusetts. Some of the potential benefits include:

- The MPX Project will connect all segments of the Boston and Massachusetts population, including those that would not normally be able to afford renewables, to an actual physical connection to sources of renewable energy.
- Potential access to supply Massport and the City of Boston with physical connections to clean energy. This could even support consideration of replacing the burning of bunker fuel by passenger ships in Boston harbor through the creation of shore-to-ship power.
- Fully meets the objectives of the Green Communities Act.

The MPX Project provides significant reliability enhancements for Boston and the metropolitan region. It will provide a large source of clean energy at the Boston load center, provide voltage support and black start capability.

The MPX Project will also provide economic benefits directly to Boston and Massachusetts through the construction of the HVDC converter station on the rebuilt Massport pier, undersea installation in Boston Harbor, AC interconnect to K Street Station and the K Street substation upgrade. The insertion of additional energy and capacity will provide an indirect economic benefit to customers based on the impact on energy and capacity market prices. The provision of low cost renewables will result in the best outcome on the pocket books of customers and have the least amount of impact on disposable incomes.

Value Proposition

The combined proposal of County Line and MPX represents a unique opportunity to delivered cost effective renewable energy and transmission capacity starting in [REDACTED].

County Line Proposition

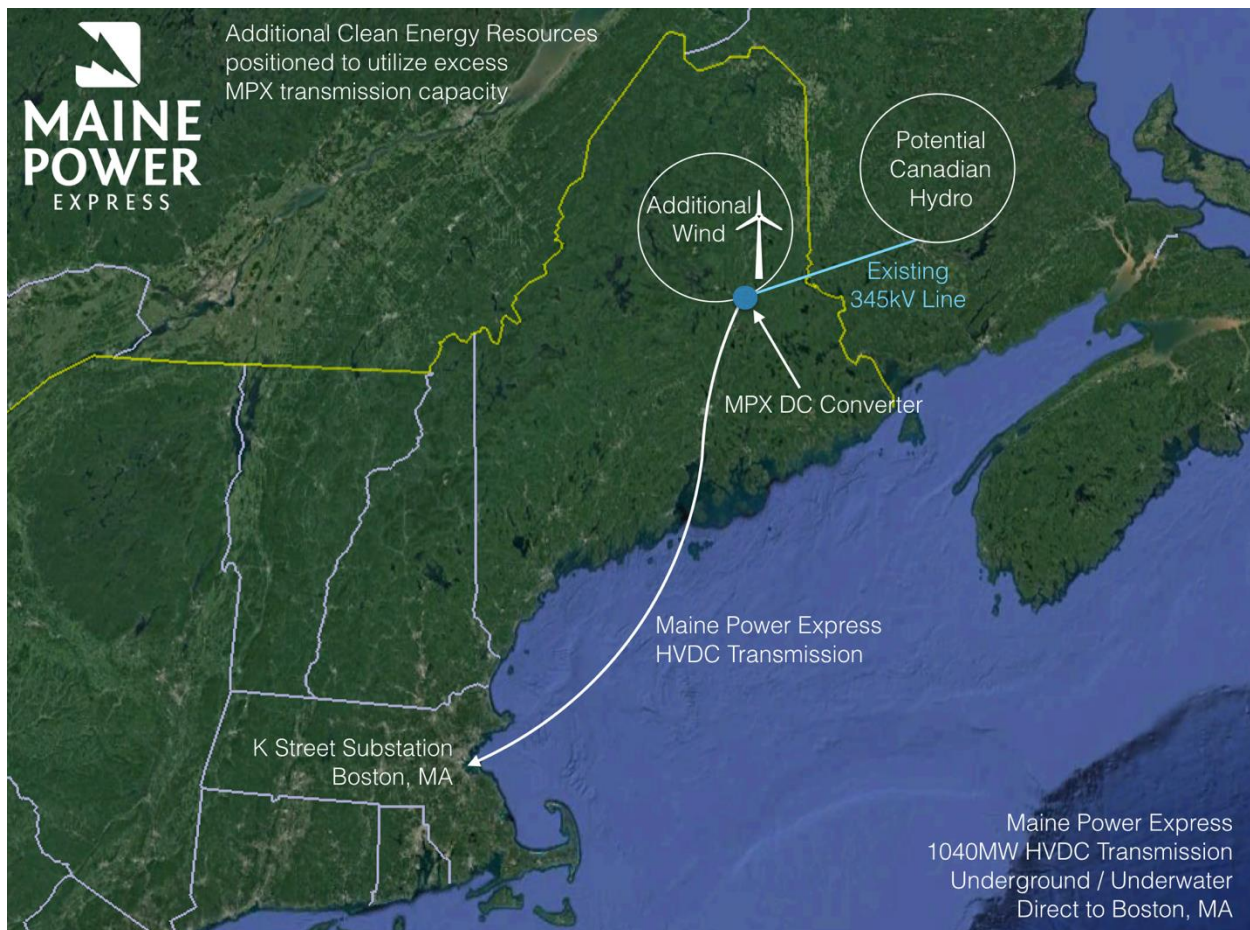
- Flat price of [REDACTED] energy and RECS starting in [REDACTED].
- Over \$1 billion in lifetime ratepayer savings based on energy and RECs alone/almost \$500 million including transmission costs
- County Line Wind will enhance electricity reliability by adding incremental energy and capacity to the ISO-NE region.
- The Project will help the Procuring States meet their energy and climate change goals by delivering over [REDACTED] GWh of clean energy annually, offsetting generation and associated pollution from regional fossil generation sources.
- All Project net electrical energy, capacity, REC's and environmental attributes
- 20 year Power Purchase Agreement

Maine Power Express Proposition

The MPX Project is competitively positioned to link low cost Class I RPS renewable resources at a cost-effective delivered price to the major demand center of Boston and all of Massachusetts. The MPX Project avoids the existing constraints of the New England transmission system for delivery of 1,040 MWs directly into Boston.

[REDACTED]

The ability to debottleneck the advantaged resource region of New England will lead to the release of additional renewable resources. In fact, MPX expects that the other wind and hydro projects within Northern Maine and Canada could be easily combined to the NRG/MPX bid to create a fully-utilized, high capacity factor HVDC line to Boston, as represented in the graphic below.



[illegible]

- Northern Maine wind development projects, [REDACTED]
[REDACTED]
- Canadian clean energy (e.g. hydro, wind, and tidal) via the MEPCO line, [REDACTED]
[REDACTED], that could either be used as firm or firming
- Existing constrained, non-qualified generation in Maine and New Brunswick [REDACTED]
[REDACTED] that have expressed interest in unconstrained access to
Massachusetts markets

- MPX will continue to actively engage additional generators to increase the utilization of the MPX Project.
- MPX proposes that the RFP evaluators consider consolidating proposals to achieve the highest use of the MPX Project.

- Further, MPX encourages the RFP evaluators to consider that by relieving transmission constraints, additional clean energy projects will become more likely to proceed to construction.

Alternative Proposal

To support the control of the full capacity of the MPX Project, MPX offers the free Alternative Proposal of providing the project to the EDCs for the life of the project with a final payment option. The Alternative Proposal option involves the same price and payments for the 20-year contract period, but involves a final payment of [REDACTED] at the beginning of year 21 to obtain clear ownership of the MPX Project starting in the 21st year. Transmission assets are typically assigned a 40-year life. However, the experience of actual transmission lines suggests a far longer life of transmission lines if properly operated and maintained. The continued ownership and operation of the transmission line would therefore guarantee continued environmental attributes for at least double the term of the original contract period. Without the ownership option, the continued renewable supply from the MPX Project to Boston and Massachusetts is uncertain.

Summary

The MPX Project offers a unique and unsurpassed range of benefits to the customers of Massachusetts:

Low Delivered Cost of Renewables	Directly Serves Boston and Massachusetts	Most Viable Path to Construction
<ul style="list-style-type: none">•Accesses superior, low cost renewable regions•Avoids expensive system re-enforcement costs•Can be loaded to achieve attractive cost of transmission	<ul style="list-style-type: none">•Physical connection to deliver Green benefits to all customer segments•Direct Reliability benefits•Direct and indirect economic benefits	<ul style="list-style-type: none">•Control of existing ROW•Underground/ underwater•Favorable ISO-NE Queue position

These factors, described in greater detail throughout this proposal, demonstrate that the strategic partnership between NRG and MPX has the experience, development platform, supply chain, and capital to execute on our commitments, so that the Soliciting Parties can fully capture the intended environmental, financial, and reliability benefits of their procurement.

3. Operational Parameters

3.1 Maintenance Outage Requirements

Specify partial and complete planned outage requirements in weeks or days for all generation facilities and transmission facilities. Also, list the number of months required for the cycle to repeat (e.g., list time interval of minor and major overhauls, and the duration of overhauls.)

Summary of Maintenance Plan

Type of Maintenance	Description & Duration
Wind Turbine Semi-Annual Maintenance	36-72 hours per year; no more than 3 turbines down at any given time unless wind conditions allow more turbines to be worked on with no net impact to scheduled power output
Turbine Transformers	Continuous monitoring and maintenance; these tasks can be performed safely with the wind turbine energized
Substation Annual Maintenance	4-6 days per year, continuous, with 2-3 days outage scheduled with local grid operator
Collection and Transmission Semi-Annual Maintenance	1-2 days per year, scheduled in line with Substation maintenance/outage

Wind Turbine Maintenance

County Line Project – Wind turbine maintenance follows the schedule provided by the manufacturer. Turbine maintenance is currently planned to be performed by the manufacturer under an O&M contract. The routine turbine maintenance schedule includes break-in service for new turbines through the earlier 3-5 months of turbine final commissioning or facility-wide Commercial Operations Date (“COD”).

Once COD has been achieved, the turbines have annual and semi-annual maintenance performed, requiring a total of 36-72 hours per turbine per year. A complete site-wide facility maintenance outage (grid disconnect) is not required for turbine maintenance; rather, routine maintenance results in a partial outage, in which the capacity de-rating is turbine nameplate (in megawatts) multiplied by the number of turbines having maintenance done concurrently, which is no more than 3 turbines simultaneously, or 12.6 MW for County Line Wind.

Balance of Plant Maintenance

County Line Project -

Balance of Plant (“BOP”) infrastructure is defined as; the substation, collection system, turbine transformers, and generator leads.

Substation maintenance will be conducted annually, over a 4-6 day continuous time period. A planned maintenance outage of 2-3 days is scheduled with Maine Power Express, the transmission line operator, and Eversource, the local grid operator at the termination of the MPX line, in accordance with the Project's Interconnection Agreement and applicable regulatory and procedural requirements.

Annual inspection and maintenance of the collection system, low voltage transmission equipment and generator lead normally required 1-1.5 days of planned maintenance. This work will be scheduled and performed at the same time as substation maintenance.

The turbine transformers (one each per wind turbine) and the grounding and/or step down/step up transformers (if needed) in the collection system are designed for long-term continuous operation. All oil sampling will be conducted during other scheduled outage work. The transformers do have routine condition assessment tasks performed that require an operator to be physically at the unit; examples include oil sampling, physical inspection, and temperature monitoring. These tasks can be performed safely with the wind operating.

MPX Project – ABB has provided a preliminary list of maintenance activities including information regarding the preventive maintenance activities that require the HVDC stations to be out of service and de-energized. Preventive maintenance activities for different equipment can be performed in parallel so the necessary outage time for the HVDC stations is determined by the equipment that has the longest duration of preventive maintenance work. For the MPX Project HVDC stations, that would be the IGBT valves. See **CONFIDENTIAL MPX Attachment 3.1**.

3.2 Operating Constraints

Specify all the expected operating constraints and operation restrictions for the project (i.e. limits on the number of hours a unit may be operated per year or unit of time). If the bid includes firm deliveries, list the anticipated situations and frequency of interruptions of transmission sources which would affect power deliveries.

County Line Project –

Wind turbines typically have standard operating limits related to wind speed. Generally, the turbines cannot run when wind speed is less than 3 meters/second or when wind speed exceeds 25 meters/second, in which case the turbines must be shut down for safety reasons. Other adverse site conditions such as lightning, wind shear, severe icing, or turbulence may cause immediate shut down of the wind turbines.

To ensure turbine longevity, NRG is presently assuming an operational curtailment plan for the project whereby select turbines will be shut down when the wind blows from a certain wind direction above a certain wind speed.

Additionally, an environmental curtailment plan has been assumed for the Project whereby turbines will be shut down under certain low wind speed conditions to reduce bat mortality. This operational plan is based on existing curtailment regulations applied in the State of Maine. NRG plans to work with Maine regulators to pursue “smart curtailment” options, which would increase production but maintain (or even improve) environmental protection standards. If successful, NRG would be open to a price reduction commensurate with the value of the additional generation.

Loss factors, which include operational curtailment and bat curtailment assumptions, are described in Section 4.

MPX Project - ABB has provided a preliminary list of maintenance activities including information regarding the preventive maintenance activities that require the HVDC stations to be out of service and de-energized. Preventive maintenance activities for different equipment can be performed in parallel so the necessary outage time for the HVDC stations is determined by the equipment that has the longest duration of preventive maintenance work. For the MPX Project HVDC stations, that would be the IGBT valves. See **CONFIDENTIAL MPX Attachment 3.2**.

3.3 Reliability

Describe how the proposal would provide enhanced electricity reliability to Massachusetts, including its impact on transmission constraints.

County Line Project - County Line Wind will provide reliability benefits by adding incremental energy and capacity to the ISO-NE region, thereby increasing reserve supply margins. As has been well documented, New England is dependent on natural gas for heating as well as electricity generation, particularly in the winter months. The lack of local gas supply and regional pipeline constraints has raised reliability concerns. As a winter peaking resource, the Project will enhance electric reliability within New England during those months when gas supplies tend to be tightest.

County Line Wind is uniquely positioned to provide these reliability benefits at a large scale to southern New England. While other Maine wind resources will face material transmission constraints during winter months, County Line will be able to deliver full capacity and reliability benefits directly to the NEMA-BOSTON load zone.

MPX Project - As an HVDC line interconnecting directly into K Street Substation in the city of Boston, the MPX Project bypasses the major transmission constraints in Maine, Massachusetts and New England as a whole. Wind generated in Maine and imports from New Brunswick interconnecting to the existing AC system are limited by constraints at the Orrington-South and Surowiec-South interfaces in Maine and the Maine-New Hampshire and the North-South interface along the northern Massachusetts border. These constraints are the subject of the ISO New England 2015 Economic Study Strategic Transmission Analysis – Onshore Wind Integration dated September 2, 2016. See **CONFIDENTIAL MPX Attachment 3.3**. The MPX Project is not

subject to these constraints, and energy flowing over the HVDC line into Boston will never be limited due to any constraints on the ISO New England ("ISO-NE") transmission system. Further, Interconnecting the MPX Project at the K Street Substation in Boston will require upgrades to the current configuration of the substation, thereby enhancing reliability at K Street and greater Boston area.

As an HVDC transmission line, the MPX Project can provide additional reliability benefits to ISO-NE:

- The MPX Project's Voltage-Sourced converters ("VSCs") can be controlled to produce and absorb reactive power.
- The VSCs can also provide an ideal standby facility for black start of the interconnected AC system, if necessary.
- HVDC technology generates significantly less fault current due to electric faults than AC systems; it also isolates any fault currents from the rest of the transmission system, thereby improving reliability.

Although not required for the approval of this proposal, MPX will propose the construction of a 345kV substation to interconnect to the Maine Electric Power Company ("MEPCO") transmission line 396 between the New Brunswick border and Orrington, ME. The MPX Project would interconnect with the MEPCO line north of the Orrington – South interface in Maine, which is currently constrained. This northern interconnection would allow the MPX Project to simultaneously bring increased hydroelectric and other clean energy imports from Northern Maine and New Brunswick, while relieving congestion further south in the Maine system. It is anticipated that an interconnection request and study could be completed and approved in 18 months and the required work (345 kV substation) to complete the interconnection to the MEPCO line could be completed by 2021.

ISO-NE commissioned ABB to create a System Impact Study ("SIS") evaluating the impact of the proposed MPX Project on the reliability of the New England System. See **CONFIDENTIAL MPX Attachment 3.3**. For the SIS, the MPX Project was defined as a 1,000MW, ± 320 kV 315 mile HVDC transmission line originating in Haynesville, ME³ and terminating at the K Street substation in Boston, MA. The findings of the SIS are very encouraging. Some of the outcome of the study is stated below.

- Steady state analysis was performed on different load conditions to evaluate a broad range of potential operating conditions; the study concluded there were no negative system impact or voltage related issues due to the MPX Project.
- At the locations closest to the MPX Project Interconnection (K Street and Stoughton), the breaker duties were found to be well within their respective ratings, with the MPX Project causing minimal incremental impact.

³ Since the Elective Transmission Upgrade was submitted, the MPX Project has relocated to a township in southern Aroostook County. This was not considered a material change by ISO-NE and did not impact the MPX Project Queue position.

- As modeled, the MPX Project demonstrated and adhered to ISO-NE's Voltage and Reactive Power Control requirements, as well as the ISO's Frequency Response requirement.
- A screening of the short-circuit strength available at the MPX Project's point of interconnection was undertaken in order to ensure that the MPX Project would remain operable under operating conditions which substantially weaken the transmission system. Several combinations of facility outage conditions were simulated and no concerns were found in the operation even at the weakest possible network condition.

A comparison between the pre- and post-project voltages in Maine (Cooper's Mills and Orrington 345kV) indicated no adverse impact due to the MPX Project. In fact, the plots identified about 3% improvement in the transient voltage at those buses.

3.4 Moderation of System Peak Load

Describe how the proposal would contribute to moderating system peak load requirements and provide the following information:

- a. *Estimated average output for each summer period (June-September) from 1:00-6:00pm*
[REDACTED]
- b. *Estimated average output for each winter period (October-May) from 5:00-7:00pm*
[REDACTED]

Adding additional, cost effective (i.e. fixed price) resources such as County Line Wind to the supply stack can help moderate system peak loads by displacing expensive peaking units that would typically be incentivized to run during high-demand periods, resulting in lower net electricity costs to ratepayers during peak periods.

MPX Project – N/A

3.5 Development Stage of All Physical Aspects of the Bid

Describe whether the project is in operation, in construction or in the development phase.

Describe whether the project is in operation, in construction or in the development phase.

- a. *If in operation, when did the project achieve commercial operation?*

County Line Project – N/A

MPX Project – N/A

- b. *If in construction, when did construction commence and what are the projected data for initial testing and commercial operation?*

County Line Project – N/A

MPX Project – N/A

- c. *If the project is partly in one development stage and partly in another, please explain in detail the status of the project.*

County Line Project – County Line Wind is a development phase project with a targeted construction start date of **Q4 2020**. Landowner agreements are in place for the entire project area including land necessary for interconnection. The survey portion of the permitting process has also commenced. An eagle nest survey was completed in May and June of this year, and NRG has contracted Stantec to begin additional biological surveys (avian and bat) on August 1 of this year. NRG anticipates that permit applications will be submitted to the Maine Department of Environmental Protection (“MDEP”) in the first half of 2019, with a target permit receipt date of early 2020. Turbine procurement and Engineering Procurement and Construction (“EPC”) contracting discussions have commenced. A PPA is the critical instrument for executing lender agreements and would be the basis for committing additional development capital to complete the Project.

MPX Project – The MPX Project is in neither the operation nor construction stage. The MPX Project is in the advanced development stage. Pending project selection through this RFP process, the MPX Project will proceed to the permitting stage. To date, MPX has:

- Secured a significant portion of site control
- Selected a permitting consultant
- Prepared a detailed permitting plan
- Selected or identified technology providers
- Selected an EPC contractor
- Conducted site visits for the converter station sites and several portions of the terrestrial route with key permitting, engineering and construction team members
- Prepared a detailed engineering plan construction schedule
- Received a Final Draft System Impact Study from ISO-NE, a key step toward I.3.9 approval
- Held preliminary consultations with key state and federal regulatory agencies.

Details of the MPX Project development status are provided in the pages below.

d. If the proposed project is an expansion, repowering, environmental investment or other modification of an existing Facility, please describe the project in detail, the total cost and cost on a \$/kW basis specifying the existing project and the proposed expansion, repowering or other modification. Indicate any incremental or decremental capacity.

County Line Project – N/A

MPX Project – N/A

4. Energy Resource and Delivery Plan

4.1 Wind Energy Projects

Provide a summary of all collected wind data for the proposed site. Identify when the data was collected and by whom.

NRG's wind resource and engineering team is comprised of industry-leading meteorologists and engineers, who have prepared the wind resource analysis presented in the following sections. Given the early stage of this project, the resource analysis to date has focused on utilizing modeled wind resource based on AWS Truepower's MesoMap system. AWS Truepower is a leading firm in wind resource evaluation. The project was acquired by NRG from FirstWind/SunEdison who were the first to initiate development of the project. When initially conceived by FirstWind/SunEdison, regional models and operational wind data from nearby operating wind projects (i.e. Oakfield, Bingham & Stetson Wind) were used to validate the viability of this site and the accuracy of AWS's MesoMap. NRG has planned a robust meteorological campaign for the project. Installation of four - 60 meter - meteorological towers (met towers) and four Sonic Detection and Ranging devices (SoDAR) units are scheduled to be operational in August 2017. NRG also plans to expand its meteorological campaign in 2018 by permitting and installing additional tower and SODAR sites.

Project Area

The project area is located in southern Aroostook and eastern Penobscot counties, Maine, in the eastern region of the state. The Project is situated on rolling hills that are currently managed by a number of commercial timber companies. The land throughout is almost completely forested with extensive logging roads and activity, providing ease of access to the Project site. The project is uniquely situated adjacent to the MEPCO transmission corridor, and thus the termination of the Maine Power Express HVDC line.

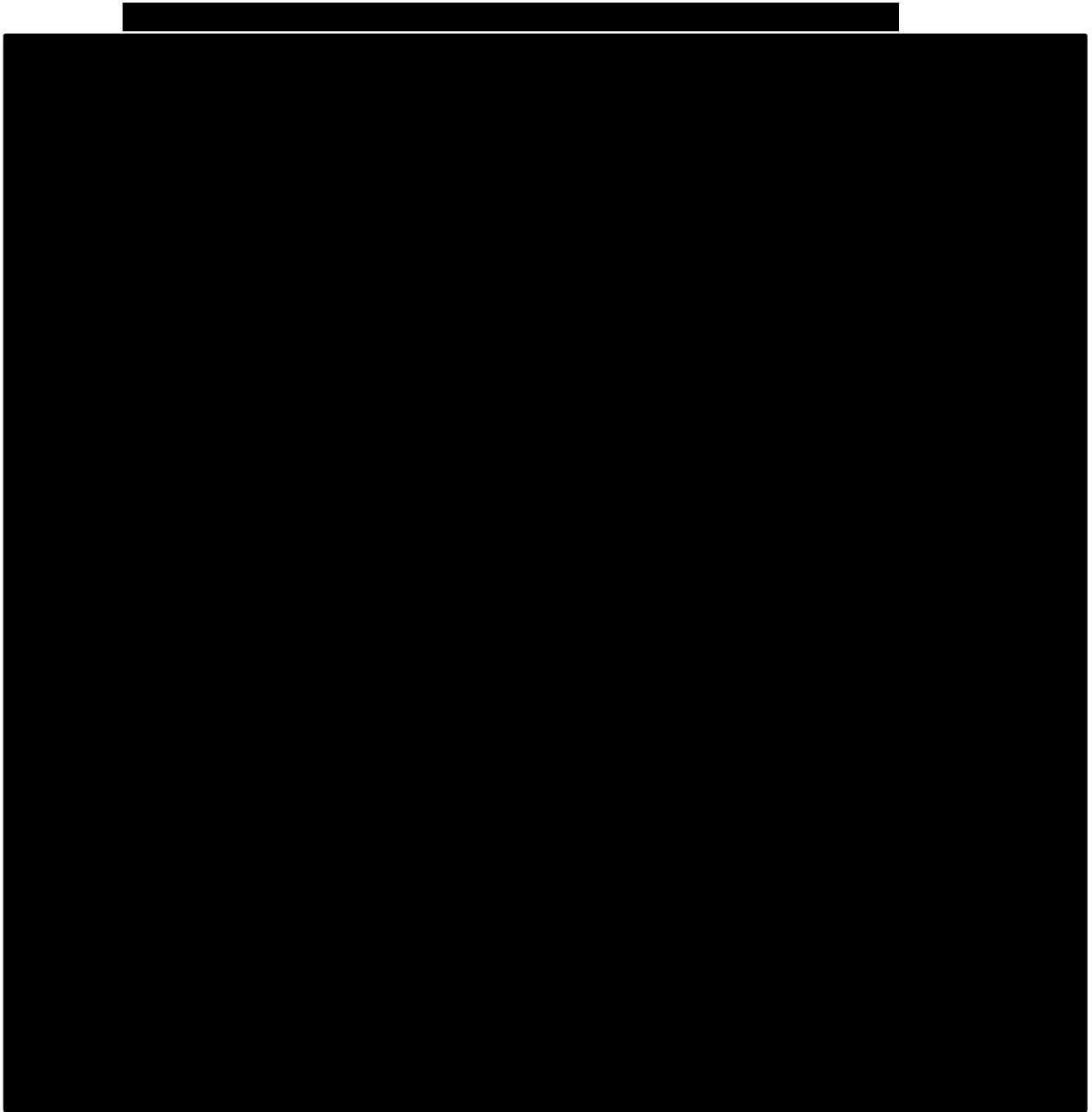
Wind Monitoring Campaign

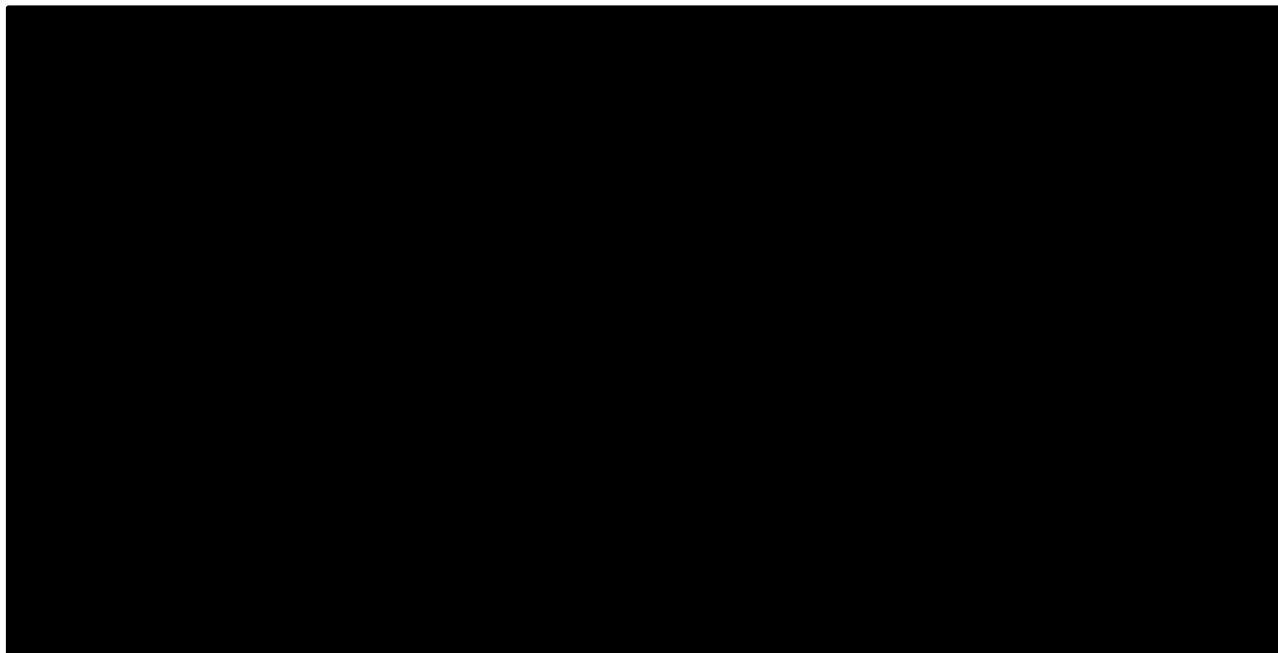
When initially conceived by FirstWind/SunEdison, regional models, wind data and operational wind data from nearby projects (i.e. Oakfield, Bingham & Stetson Wind) were used to validate the viability of this site. Since acquiring the asset from SunEdison, NRG retained AWS Truepower to analyze the project site using their proprietary MesoMap system. The Mesoscale Atmospheric Simulations System (MASS) was used to simulate regional weather patterns and then coupled with the microscale model (WindMap) simulated the localized effects of topography and surface roughness on a grid spacing of 200 m. The source of topographic data was the National Elevation Dataset (NED), a digital terrain model produced on a 30 m grid by the US Geological Survey (USGS). The source of land cover data was the 30 m resolution National Land Cover Dataset, which is produced by the USGS and derived from Landsat imagery. NRG has also employed the use of MERRA and ERA-I reanalysis datasets for modeling and verification of the wind regime.

4. Energy Resource and Delivery Plan

Indicate where the data was collected and its proximity to the proposed site. Include an identification of the location and height for the anemometers that were used to arrive at an assessment of the site generation capability.

The monitoring equipment will be located at the sites identified in the map below. In addition, NRG will be permitting up to nine additional sites in early 2018, for installation in Q2/Q3 of next year. These locations are also identified in the map on the following page.





In 2018 NRG is planning to install up to nine new met towers with a combination on 60 m and 100 m towers. Additional SODAR units will be collocated with the met towers to verify wind shear.

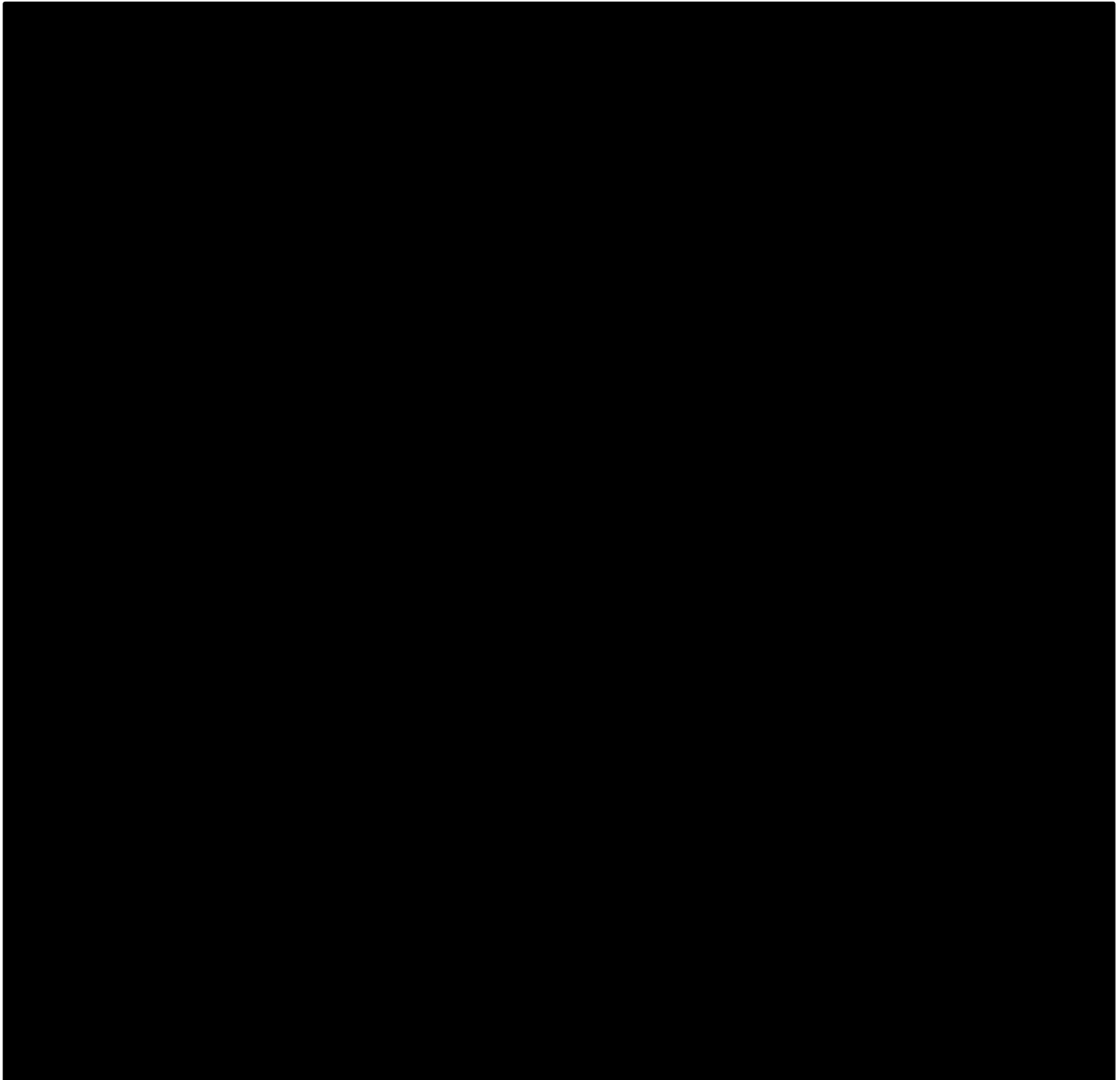
Provide (a) at least one year of hourly wind resource data, and (b) a wind resource assessment report from a qualified unaffiliated third-party wind resource assessment firm. Include any analysis of the available wind data which addresses the relationship between wind conditions and electrical output. Provide a projection of net annual energy production, including projections of average net hourly energy production, based on the wind resource data (a 12 x 12 energy projection) at both P50 and P90 levels.

A 12x24 matrix is provided in Part V of the CPPD form (**CL Attachment 1**). For additional detail on wind data analysis see the Wind Resource Analysis section below.

P50 annual energy production is [REDACTED] GWh/year. P90 annual energy production is [REDACTED] GWh/year. The uncertainty on energy production is expected to be reduced substantially with the inclusion of the onsite meteorological data.

Wind Resource Analysis

NRG's wind resource and engineering team designed the layout and performed the energy analysis for the project. The wind at the County Line project is expected to come predominantly from the west - north-west [WNW] and south-south-west [SSW] as shown on the map below. An experienced team of meteorologists and engineers designed the projects turbine layout. The layout has been designed to balance the highest energy production and lowest construction cost to optimize for cost of energy.



AWS Truepower was retained to provide a wind model for the site using AWS Truepower's proprietary MesoMap wind model. The model was estimated at a 105 m height to match the projects expected hub height.

NRG's wind resource team used the MesoMap wind model along with the power curve for the Vestas V150 – 4.2 MW turbine on AWS Trupower's OpenWind software to estimate gross energy product ion at each of the turbine location. Wake effects were estimated by OpenWind using the Deep Array Eddie Viscosity wake model. The gross energy production was adjusted

with a set of losses specific to the project, including wake, availability, performance, electrical, environmental, and curtailment loss, to estimate the net energy production potential for the County Line project.

Energy Production Analysis Summary

Factor	Value
Turbine Model	Vestas V150 4.2
Turbine Rated Capacity	4.2 MW
Turbine Hub Height	105 meters
Number of Turbines	150
Facility Capacity	630 MW
Gross Annual Energy Production	
Net Annual Energy Production	
Net Capacity Factor [NCF]	
Long Term Average Energy Production- P90	
Long Term Average Capacity Factor – P90	

The Vestas V150-4.2 turbine with a 105-meter hub height, is expected to be a suitable turbine choice for the Project based on the expected wind conditions and a preliminary review by Vestas.

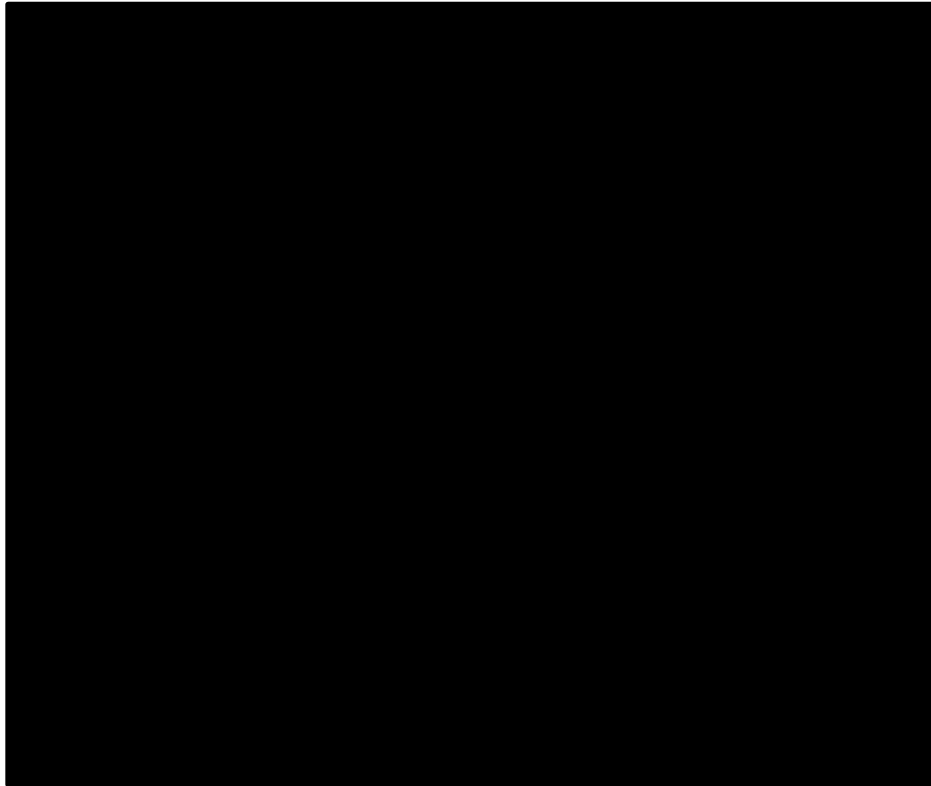
If your bid includes a delivery forecast which is substantially different than NREL data would suggest, please reconcile the differences.

See response in 4.1, Wind Monitoring Campaign.

4. Energy Resource and Delivery Plan

Provide a site-adjusted power curve. Each curve should list the elevation, temperature and air density used.





Identify the assumptions for losses in the calculation of projected annual energy production, including each element in the calculation of losses.

Loss Factors Summary

Loss Factor	Percentage
Wake Effect	████
Availability	████
Electrical	████
Turbine Performance	████
Environmental	████
Curtailment	████
Total Losses	████

Wake Effect

Wake losses were estimated using OpenWind 's Deep Array Eddie Viscosity wake model. There are no existing wind farms in the vicinity of the County Line project therefore only the turbines within the project were considered.

Availability

Availability losses account for lost production due to wind turbine maintenance, grid outages, and other events which keep turbines offline.

Availability Loss	Percentage
Contractual Turbine Availability	████
Non-Contractual Turbine Availability	████
Long-term Availability Correlation with High Wind Events	████
Availability of Collection & Substation	████
Availability of Utility Grid	████
Plant Re-start after Grid outages	████
Availability Total	████

Electrical

This factor includes electrical losses experienced through the collection system and on-site transformer up to the point of interconnection. The electrical loss was estimated to be █████. An additional █████ loss was assumed to be used by the turbines cold weather package.

Turbine Performance

This loss factor accounts for lost production due to sub-optimal performance of the wind turbines compared to their warranted power curve. This loss is expected to be █████

Environmental

The environmental losses account for impacts of the natural environment on plant performance. This includes effects such as icing events on the wind turbines, blade degradation experienced over the lifetime of the project, low temperature shutdown, lightning, and site access issues.

Environmental Loss	Percentage
Icing	████
Blade Degradation	████
Low/High Temperature Shutdown	████
Site Access	████
Lightning	████
Environmental Total	████

Curtailement

Curtailement accounts for lost production due to restricted operation of the turbines or otherwise restricted performance of the wind farm. Both an operational curtailement plan and bat curtailement plan have been assumed for the Project. The assumed bat curtailement plan considers all turbines to be curtailed from Apr20 to Oct15, 30min before sunset-30min after

4. Energy Resource and Delivery Plan

sunrise and have a cut-in speed = 6 m/s. Bat curtailment is based on existing curtailment regulations applied in the State of Maine. NRG plans to work with Maine regulators to pursue “smart curtailment” options, which would increase production but maintain (or even improve) environmental protection standards. If successful, NRG would be open to a price reduction commensurate with the value of the additional generation.

Curtailment Loss	Percentage
Directional Curtailment/WSM	████
PPA Curtailment	████
Environmental Curtailment - Bats	████
Curtailment Total	████

4.2 Clean Energy Generation Delivery Plan

Please provide documentation that any clean energy plan delivery plan that includes hydroelectric generation meets the definition of "Incremental Hydroelectric Generation" as defined in the body of the RFP.

N/A

Please provide an energy delivery plan and profile for the proposed project, including supporting documentation. The energy delivery profile must provide the expected Clean Energy Generation to be delivered into the ISO-NE market settlement system and permit the Evaluation Team to determine the reasonableness of the projections for purposes of Sections 2.2.1.3 Eligible Bid Categories and 2.2.1.7 Minimum Contract Size of the RFP. Such information should be consistent with the energy resource plan provided above and also considering any and all constraints to physical delivery into ISO-NE.

County Line Project - The 12x24 energy production profile is provided in the CPPD form (**CONFIDENTIAL CL Attachment 1**). For the purposes of bid evaluation and contract settlement, the point of delivery will be the Boston K-Street Substation.

Clean Energy Generation for projects containing new Class I eligible resources only must comply with Section 2.2.2.7 of the RFP. They must submit a delivery profile guaranteeing 70% of the energy in their delivery profile for the Winter Peak Period over the course of every Winter Peak Period on the CPPD form in their bidder response package.

Clean Energy Generation for projects containing firm service hydroelectric generation, and Clean Energy from new Class I RPS eligible resources paired with firm service hydroelectric generation must comply with section 2.2.2.7 of the RFP. They will be required to submit a delivery profile with no Winter Peak Period less than 60% of their highest annual single hourly delivery claimed in their annual delivery profile as submitted as a part of their CPPD form in their bidder response package. Bidders will be required to guarantee the submitted delivery profile in all hours during the Winter Peak Period. Bidders should supply any studies performed to support this profile. Bidders should respond to all information requests which are relevant to the bid in a timely manner.

County Line Project - Please see the 12x24 production profile in Part V of the CPPD Form. NRG guarantees the required 70% deliverability during winter peak periods, as required under Section 2.2.2.7 of the RFP. In addition, it is worth pointing out that County Line is an excellent winter-peaking resource, with average generation during all winter peak hours equal to 79% of the maximum hourly delivery claimed in the annual profile.

4.3 REC/Environmental Attribute Delivery Plan

Please provide documentation demonstrating that the project will deliver GIS Certificates representing those RECs or Environmental Attributes. For projects located outside of the ISO-NE control area, describe how the Delivered energy and associated RECs or Environmental Attributes will satisfy NEPOOL-GIS rules for the Delivery of GIS Certificates.

County Line Project - As a wind generator beginning operation after December 31, 1997, this project would be eligible for the generation of Class I RECs in Massachusetts. NRG plans to register the project in the NEPOOL-GIS system at the appropriate time, for the purposes of REC minting and delivery. As an active participant in the NEPOOL REC system, NRG has all necessary capabilities required to satisfy these requirements.

5. Financial/Legal

5.1 Each bidder is required to submit information and documentation that demonstrates that a long term contract resulting from this RFP Process would either permit the bidder to finance its proposal that would otherwise not be financeable, or assist the bidder in obtaining financing of its proposal.

County Line Project - NRG recognizes that a renewable energy project's viability is dependent upon the project owner's ability to execute a financing structure which efficiently manages working capital and maximizes return on equity. Such financing structures are complex and require a sophisticated project owner to manage the interests of multiple investor stakeholders. For any investor to commit the necessary resources to underwrite a renewable energy project, the project owner must demonstrate that the project has secured long-term contracted cash flows from a credit-worthy counterparty. As such, winning a long-term contract from this RFP process is the first step to kicking-off the project financing process with our investor partners.

NRG's diversified portfolio and financing experience with a variety of long-term generation assets, both renewable and conventional, puts NRG in a unique negotiating position with financing institutions — a leverage that is not available to our pure play competitors. The deep relationships and prospects for future business that is attractive to capital providers ensure financing execution with the most competitive terms available.

MPX Project – As discussed, per the terms of the RFP, MPX is not a "Bidder." However, MPX volunteers the following Financial/Legal information for Item 5.1:

While CET has the ability to finance the MPX Project, it plans to project finance the MPX Project. The long-term contract resulting from this RFP will assist Con Edison in achieving this objective.

5.2 Please provide a description of the business entity structure of the bidder's organization from a financial and legal perspective, including all general and limited partners, officers, directors, managers, members and shareholders, involvement of any subsidiaries supporting the project, and the provider of equity and debt participants and an explanation of the relationships. For jointly owned facilities, identify all owners and their respective interests, and document the Bidder's right to submit a binding proposal.

Parent Company

NRG Energy, Inc. ("NRG") is a Fortune 200 company that owns and operates approximately 50,000 MW of generation capacity nationwide. With dual headquarters in Princeton, New Jersey and Houston, Texas, NRG is the largest competitive power producer in the U.S. NRG's portfolio includes more than 134 generating plants in 29 states. Through its subsidiary NRG Renew LLC and financing vehicle NRG Yield, Inc. (see below for additional detail), NRG develops, constructs, finances, owns and operates solar and wind assets, both onsite and utility-scale.

NRG's approximately 4,800 MWAC of wind and solar generation assets make us the third-largest, utility-scale renewable energy generator in North America.

NRG and its subsidiary companies also comprise the largest integrated competitive retail energy provider nationwide. NRG satisfied approximately 42,000 GWh in retail obligations in 2016, and nationally it is the #2 residential electricity provider in the United States. NRG's retail brands include Reliant and Green Mountain, as well as other well-known brands locally and in the Northeast.

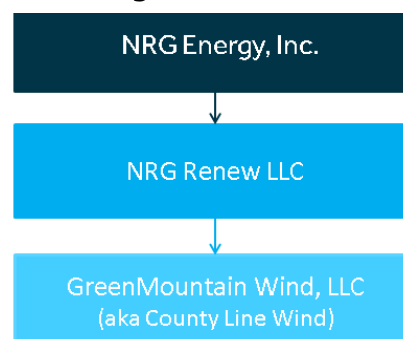
Financing Vehicle

NRG Yield, Inc. ("NYLD") is a dividend growth-oriented company formed as a Delaware corporation on December 20, 2012, to serve as the primary vehicle through which NRG Energy, Inc. owns, operates and acquires contracted renewable and conventional generation and thermal infrastructure assets. NYLD's contracted generation portfolio as of December 31, 2016 collectively represents 4,563 MW. NYLD also owns thermal infrastructure assets with an aggregate steam and chilled water capacity of 1,319 net MWt and electric generation capacity of 123 net MW.

Bidding Organization

Established in 2009, NRG Renew LLC is a wholly-owned subsidiary of NRG Energy, Inc. and is the largest renewables platform in the U.S. The Company's renewables business consists primarily of its wind and solar generation facilities as well as business-to-business distributed solar. NRG has 1,892 megawatts of operating solar projects, including utility, commercial, industrial, governmental, institutional and community solar projects, inclusive of those held by the Company and in partnership with NRG Yield, Inc. In addition to assets in operation, as of Q1 2017, NRG Renewables' business held a backlog of in-construction, contracted and awarded projects of 646 MW, and a pipeline of 4,608 MW across the utility and distributed solar renewables markets.

NRG Organizational Chart



NRG's parent entity recently completed a comprehensive business strategy review of both its conventional and renewables platform at the request of its board. As a result of the business review, NRG is exploring the strategic recapitalization of 51% or more of its market-leading renewables platform, which would include both operational and development-stage projects. NRG is continuing to proactively support and invest in its renewables business throughout this process—it is "business as usual" with no change to existing contractual obligations or access to project financing, and no change in the growth plan our renewables business has been executing on successfully since 2015.

County Line Wind

If our proposal is selected, NRG will establish and execute a PPA through County Line Wind LLC, special purpose vehicle ("SPV"), or project company which is wholly-owned by NRG Renew LLC. The SPV is set up to enable our investors to finance the project directly and on a non-recourse basis.

There are additional holding companies between NRG Energy, Inc. and NRG Renew, as well as between NRG Renew and the project company. The org chart above highlights the key levels of the NRG organization at which financials are reported.

Principal Officers

NRG Energy, Inc.'s management team includes the following personnel:

NRG Energy, Inc. Board of Directors

- E. Spencer Abraham, Director
- Kirbyjon H. Caldwell, Director
- Lawrence S. Coben, Chairman of the Board
- Terry Dallas, Director
- Mauricio Gutierrez, Director
- William Hantke, Director
- Paul Hobby, Director / Finance and Risk Management Committee
- Edward Muller, Vice Chairman of the Board
- Anne Schaumburg, Director / Finance and Risk Management Committee
- Evan Silverstein, Director
- Barry T. Smitherman
- Thomas Weidemeyer, Director
- C. John Wilder
- Walter Young, Director / Audit Committee Member

NRG Energy, Inc. Management Team

- Mauricio Gutierrez, President and Chief Executive Officer
- Kirkland B. Andrews, Executive VP and Chief Financial Officer & CEO
- David Russell Hill, Executive VP and General Counsel
- John Chillemi, Executive Vice President, National Business Development
- Elizabeth Killinger, Executive VP and President of NRG Retail
- Craig Cornelius, Senior Vice President, Renewables
- Robert J. Gaudette, Senior Vice President, NRG Business Solutions
- Chris Moser, Senior Vice President, Operations
- Judith Lagano, Senior Vice President, Asset Management
- Jennifer Vosburg, Senior Vice President, Cooperatives and Public Power Partnerships
- David Callen, Senior VP and Chief Accounting Officer

- Donna Benefield, Senior VP, Information Technology
- Michael Bramnick, Senior VP & Chief Compliance Officer
- Kevin L. Cole, Senior VP, Investor Relations
- Jennifer Wallace, Senior VP, Administration
- Bruno Sarda, VP, Sustainability

NRG Renew LLC

- Craig Cornelius, President
- Gaetan Frotte, VP & Treasurer
- Jennifer Hein, Secretary
- Deborah R. Fry, Assistant Secretary
- Cindy Van Dran, Assistant Secretary
- David Callen, VP
- Randall Hickok, VP
- John Karam, VP
- Daniel M. Keane, VP
- Krisshna Koomar, MP
- Glen E. Mackey, CP

MPX Project - As discussed, per the terms of the RFP, MPX is not a "Bidder." However, MPX volunteers the following Financial/Legal information for Item 5.2:

Maine Power Express, LLC ("MPX,LLC") is a Joint Venture between Loring Holdings, LLC (■■■■), National Resources Energy, LLC (■■■■) and Transmission Developers, Inc. (■■■■). MPX,LLC has assembled an expert team of development and strategic partners to design, engineer, permit, finance, construct and operate the MPX Project.

Con Edison Transmission ("CET") is the funding development partner and anticipated owner and operator of the MPX Project⁴. CET is a successful developer of transmission projects. CET is the largest partner and currently holds the leadership role within the New York Transco, the electric transmission partnership that includes National Grid, Avangrid, and Fortis. CET has developed successful bids for public policy solicitations. CET constructed and contributed two of the partnership's three projects, both of which began operation. CET is providing on-going O&M services for projects in operation. CET are well positioned with regulators, other utilities, ISOs and policy organizations to identify market and policy needs and to propose new projects. CET is a wholly owned subsidiary of Consolidated Edison, Inc.

⁴ The term "MPX Project" refers specifically to the transmission line. The term "MPX" refers to MPX,LLC and CET as the Joint Development team.

For more than 195 years, Consolidated Edison, Inc. has served the world's most dynamic and demanding marketplace - metropolitan New York. Con Edison, Inc.⁵, is incorporated in New York State and is a holding company that owns all of the outstanding common stock of Consolidated Edison Company of New York, Inc. ("CECONY"), Orange and Rockland Utilities, Inc. ("O&R"), Clean Energy Businesses ("CEBs") and CET, which was formed in 2014 to invest in electric transmission and gas pipelines.

As one of the largest electric companies in the country and the parent of NYC's local utility, Con Edison possesses unique experience. Indeed, the Con Edison companies are leaders in their specific sectors of the energy businesses. As the electric utility responsible for reliably providing electric service to more than three million customers in NYC, CECONY understands and has had responsibility for designing and managing the electric grid in NYC for over 130 years. CECONY also has experience in managing programs and aggregate solutions to meet various public policy goals. Con Edison Energy ("CEE") is a leading third-party energy manager with extensive experience in procuring and delivering renewable power, including in-depth experience scheduling energy and/or capacity on the Hudson Transmission Line (NJ to NYC), Neptune Cable (PJM to LI), and Cross-Sound Cable (ISO-NE to LI). Con Edison Development ("CED") is the fifth largest developer of solar power and a developer of other utility scale renewables, and Con Edison Solutions ("CES") is an experienced developer of distributed renewables, energy efficiency and demand side management solutions.

Through its various subsidiaries, Con Edison has developed numerous large-scale transmission projects over the past five years, including: Ramapo to Rock Tavern, Rainey to Corona, Staten Island Unbottling, and M29 (more detail about these projects is available in the responses to questions 5.3 and 11.5).

The equity capital for the MPX Project will be provided by CET.

5.2.i For projects that include new facilities or capital investment, provide a description of the financing plan for the project, including construction and term financing. The financing plan should address the following:

- i. Who will finance the project and the related financing mechanism or mechanisms that will be used (i.e. convertible debenture, equity or other) including repayment schedules and conversion features*

County Line – NRG arranges 100% of a project's required funding through a combination of sponsor equity, construction financing, tax equity, and project-level debt. Our investors are acutely aware of NRG's development initiatives with partners like DOER and tend to look favorably on long histories of community engagement and financial strength.

MPX Project –

MPX and Con Edison will fully fund the development period of the MPX Project with equity. MPX and Con Edison will finance the MPX Project with equity funded from Con Edison cash balances and debt funded from banks, export credit / vendor financing and institutional debt sourced on

⁵ The term "Con Edison" references Consolidated Edison Inc., the Holding Company and/or all affiliated companies. "CET" refers specifically to Con Edison Transmission, Inc. and its affiliates.

market terms. At Notice to Proceed ("NTP") for construction, the MPX Project will be funded using a market-standard project finance structure. Equity investment will represent approximately [REDACTED] of the total construction cost, including the development period capital investment. Equity is anticipated to be fully funded by Con Edison from available liquidity.

- The balance of the construction financing will be funded with a drawdown schedule reflecting the construction period expenses through a combination of debt instruments as indicated above. All of the construction period debt financing will contain term-out features allowing the debt to remain in place after the completion of construction.
- Upon achieving commercial operation, the debt capital structure will be optimized and refinanced, as necessary, with long-term institutional investors, to align with the MPX Project's transmission service contracts and long-term useful life of the assets. It is expected that the same capital structure [REDACTED] will be maintained during the operating period.
- The permanent financing, therefore, will consist of an equity contribution by MPX and Con Edison and long term debt.

ii. The project's existing initial financial structure and projected financial structure

County Line – The Project's initial financial structure will come from a combination of NRG Energy, Inc. and NRG Yield equity. NRG Energy, Inc. brings to the table over \$1.3 billion in corporate cash-on-hand and has agreed to provide NRG with ongoing, committed funding to finance capital expenditures. NRG Yield is a publicly-traded company that houses NRG's long-term contracted generation assets and provides access to additional sponsor equity with an industry-leading low cost of capital.

MPX Project – To-date, development of the MPX Project has been fully funded with equity provided by MPX. At NTP, the construction of the MPX Project will be funded using a market-standard project finance structure as described above.

iii. Expected sources of debt and equity financing

County Line – NRG arranges 100% of a project's required funding through a combination of sponsor equity, construction financing, tax equity, and project-level debt. Our investors are acutely aware of NRG's development initiatives with partners like DOER and tend to look favorably on long histories of community engagement and financial strength.

NRG's projected financing structure utilizes four distinct sources of capital to achieve the lowest cost of capital for the project while ensuring that funding is always available when needed:

- **Sponsor Equity** – A combination of NRG Energy, Inc. and NRG Yield equity. NRG Energy, Inc. brings to the table over \$1.3 billion in corporate cash-on-hand and has agreed to provide NRG with ongoing, committed funding to finance capital expenditures. NRG Yield is a publicly-traded company that houses NRG's long-term contracted generation assets and provides access to additional sponsor equity with an industry-leading low cost of capital.

- **Construction Financing** – A revolving credit facility that provides capital during the project’s construction phase. NRG has more than [REDACTED] of projects scheduled to draw from our construction revolver this year and can easily accommodate an additional project for DOER.
- **Tax Equity** – NRG works with some of the largest financial institutions in the United States to provide equity financing at the project’s Commercial Operation Date that is used to pay back the construction revolver. In return, these institutions are able to monetize federal tax credits such as the solar Investment Tax Credit (“ITC”) and accelerated depreciation while retaining only a small interest in the project’s cash flows.
- **Back Leverage** – Debt financing that is secured by the sponsor’s equity interest in the project. Back leverage is sized to the project’s cash flows and allows the sponsor to access even cheaper capital, the benefit of which is passed along to DOER in the form of a more competitive PPA price.

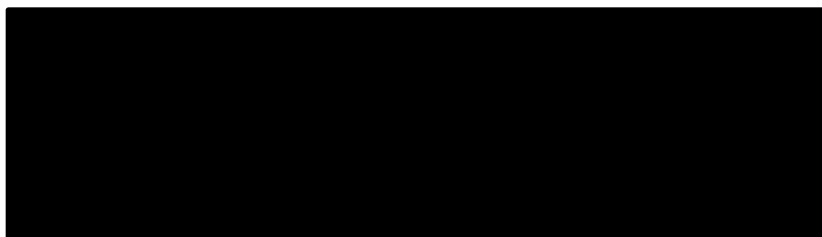
Some of the sources of capital are drawn upon during development, some at construction and others at the commencement of commercial operation of a project. For example, NRG funds equity during the development of a project with an incremental investment at Full Notice to Proceed (“FNTP”) with construction (total equity investment typically ranges 20-30% of the total construction costs). The balance of construction financing is typically provided by bank debt through an initial construction loan that is in place during the period of construction. When the project reaches commercial operation, the construction loan would be repaid, usually through a combination of tax equity proceeds and back leverage debt. The back leverage debt is typically held by the same provider as the construction debt. The permanent financing therefore consists of an equity contribution, the tax equity investment in the project, and some back leverage debt.

MPX Project – MPX and Con Edison will fully fund the development period of the MPX Project with equity. MPX and Con Edison will finance the MPX Project with equity funded from Con Edison cash balances and debt funded from banks, export credit / vendor financing and institutional debt sourced on market terms. At NTP for construction, the MPX Project will be funded using a market-standard project finance structure. Equity investment will represent approximately [REDACTED] of the total construction cost, including the development period capital investment. Equity is anticipated to be fully funded by Con Edison from available liquidity.

- The balance of the construction financing will be funded with a drawdown schedule reflecting the construction period expenses through a combination of debt instruments as indicated above. All of the construction period debt financing will contain term-out features allowing the debt to remain in place after the completion of construction.
- Upon achieving commercial operation, the debt capital structure will be optimized and refinanced, as necessary, with long-term institutional investors, to align with the MPX Project’s transmission service contracts and long-term useful life of the assets.

It is expected that the same capital structure [REDACTED] will be maintained during the operating period.

- The permanent financing, therefore, will consist of an equity contribution by MPX and Con Edison and long-term debt.
- MPX and Con Edison have discussed the MPX Project and similar large-scale energy infrastructure projects with its relationship in the debt markets and have received strong support regarding the availability and competitive terms for both the construction period and long-term project debt.

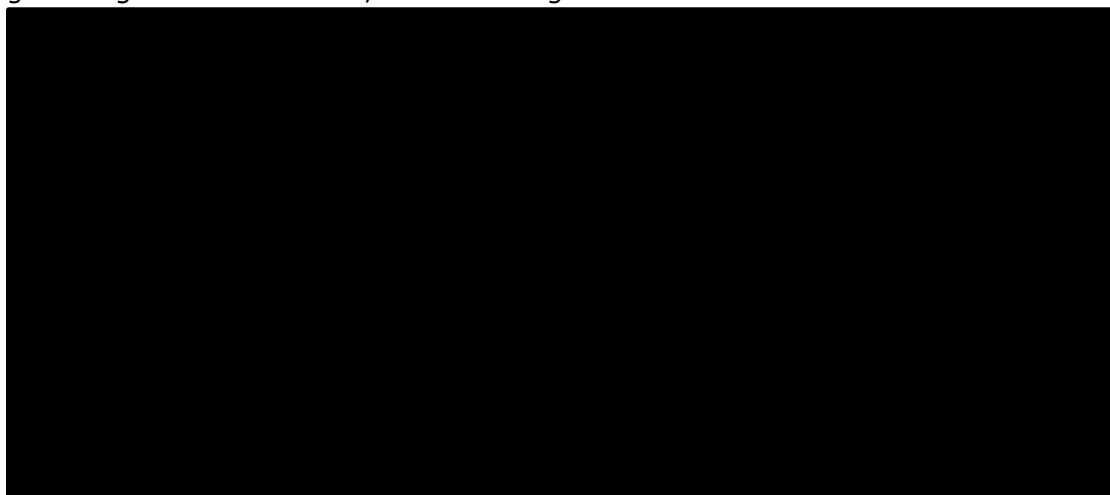


iv. Estimated construction costs

County Line – The project is estimated to have a total cost of approximately [REDACTED] million. This cost is inclusive of all development, engineering and construction, and financing costs. Given current capital sources and a track record of financing wind projects ranging from less than 15 MW to 947 MW, NRG has the transactional experience, access to capital, and facilities necessary to finance County Line Wind.

For further information on construction and equipment costs please see proposals from Vestas and Reed & Reed (**CL Attachment 5.2.i**).

MPX Project – The MPX Project is estimated to have a total cost of approximately [REDACTED] (see table below). Kiewit, ABB, and CET have provided a preliminary estimate of the MPX Project construction costs. The total MPX Project cost is inclusive of all development, engineering and construction, and financing costs.



v. The projected capital structure

County Line – Our projected capital structure is described in our responses to 5.2.i.i, 5.2.i.ii, 5.2.i.iii.

MPX Project – See response to 5.2.iii.

- vi. *Describe any agreements, both pre and post commercial operation date, entered into with respect to equity ownership in the proposed project and any other financing arrangement.*

County Line – NRG acquired the equity interest of the proposed project through the corporate bankruptcy proceeding of SunEdison, Inc. in August 2016, which was memorialized by a Purchase Agreement. To date there are no other financing arrangements with other counterparties for the proposed project.

MPX Project – [REDACTED]

CET has engaged Ansonia Partners as advisors to assist in structuring the project financing for the development and construction of the MPX Project.

- vii. *In addition, the financing plan should address the status of the above activities as well as the financing of development and permitting costs. All bidders are required to provide this information.*

County Line Project – NRG is currently in discussions with investors to finance the construction and operation of the Project, but any firm commitment to finance is contingent upon receipt of a long-term contract from a credit-worthy counterparty. To date, NRG has been funding development and permitting activities with its own equity and plans to refresh the development budget with additional capital upon execution of a long-term contract.

MPX Project – MPX and Con Edison expect to fund the development and permitting costs with equity capital sourced from available liquidity.

Ansonia Partners, on behalf of MPX, has performed market soundings related to the MPX Project with a broad range of debt capital providers including banks, export credit lenders and institutional fixed income investors. Ansonia Partners is confident that the project financing plan developed for the construction and operation of the MPX Project is consistent with comparable transactions and reflects expected market terms required to successfully finance the project.

5.3 Provide documentation illustrating the experience of the project sponsor in securing financing for projects of similar size and technology. For each project previously financed provide the following information:

- i. *Project name and location*
- ii. *Project type and size*
- iii. *Date of construction and permanent financing*
- iv. *Form of debt and equity financing*
- v. *The projected capital structure*

- vi. *Describe any agreements, both pre and post commercial operation date, entered into with respect to equity ownership in the proposed project and any other financing arrangement.*
- vii. *In addition, the financing plan should address the status of the above activities as well as the financing of development and permitting costs. All bidders are required to provide this information.*

County Line Project –

NRG has extensive experience in financing projects, whether a cluster of small-scale commercial solar projects or the largest wind and solar arrays in the country. We have completed more than \$10 billion in financings over the last few years across more than 140 projects, totaling more than 1,800 MW of solar and over 2,966 MW of wind. NRG has proven expertise in financing, executing, and operating projects of varying size and type —via PPA, equipment lease, or direct purchase. Our significant transaction expertise and variety of financial resources clearly illustrate our ability to successfully finance a variety of projects through a combination of existing balance sheet cash and leveraging future cash flows from owned projects. NRG’s responses to question above are provided in the table below labeled “Previously Financed Wind Projects.”

Recently Financed Wind Projects

Project	Location	Generation	Financing Type	Net MW	Debt \$MM	Financial Close
Broken Bow/ Crofton	Nebraska	Wind	Banks	122	■	2016
Buckthorn Wind	Texas	Wind	Banks	101	■	2017
Cedro Hill	Texas	Wind	Banks	150	■	2016
High Lonesome	New Mexico	Wind	2010A and B Bonds	100	■	2011
Laredo Ridge	Nebraska	Wind	Banks	80	■	2014
Sherbino	Texas	Wind	Banks	75	■	2008
South Trent	Texas	Wind	Banks	101	■	2010
Tapestry	Oklahoma, West Virginia	Wind	Banks	204	■	2011
Viento II	Texas, New Mexico, Nebraska	Wind	Banks	361	■	2009
Total				1,294	■	

██████████ The transmission system consists of approximately 500 miles of overhead high voltage transmission, 700 miles of below grade high voltage transmission and over 100 high voltage substations. Below is a description of a few of the recent transmission projects completed and

[illegible]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[illegible]

NRG is a uniquely positioned project sponsor given our track record, balance sheet, and diverse operating portfolio. Our financing, pricing and ability to bring projects to commercial operation are not contingent upon third-party financing or financial markets—NRG is able to supply 100% of the required funding from existing liquidity, cash from operations, debt issuance via shelf note or elsewhere. As such, we provide our clients with certainty of project execution even as capital market conditions evolve over time.

NRG's financial standing, detailed below, shows our ability to finance projects:

- The largest competitive power generator in the U.S.
- One of the nation's largest solar developers



MPX Project - As discussed, per the terms of the RFP, MPX is not a "Bidder." However, MPX volunteers the following Financial/Legal information for Item 5.4:

While CET has the ability to finance the MPX Project, it plans to project finance the Project. The long-term contract resulting from this RFP will assist Con Edison in achieving this objective.

5.5 Provide complete copies of the most recent audited financial statement or annual report for each bidder for each of the past three years; including affiliates of the bidder (if audited statements are not available, reviewed or compiled statements are to be provided). Also provide the credit ratings from Standard & Poor's and Moody's (the senior unsecured long term debt rating or if not available, the corporate rating) of the bidder and any affiliates and partners.

NRG has a robust financial profile characterized by substantial free cash flow from its generation assets and retail electricity subsidiaries, as well as prudent financial and capital management.

Our parent company's most recent annual 10K report can be found at the following link:
<http://investors.nrg.com/phoenix.zhtml?c=121544&p=irol-IRHome>

Reports from 2015, 2014, and beyond can be found by navigating to the following link and clicking "Annual Report Archive."
<http://investors.nrg.com/phoenix.zhtml?c=121544&p=irol-reportsannual>

Credit Rating

	S&P	Moody's
NRG Energy, Inc.	BB- Stable	Ba3 Stable

MPX Project - The annual reports for Con Edison, Inc. are available online here:
<http://phx.corporate-ir.net/phoenix.zhtml?c=61493&p=irol-reportsannual>.

As of July 17, 2017, Con Edison, Inc. has a senior unsecured debt credit rating of BBB+ from Standard & Poor's, A3 from Moody's, and BBB+ from Fitch. Updated credit ratings are available online here: <http://phx.corporate-ir.net/phoenix.zhtml?c=61493&p=irol-creditratings>.

5.6 Please also include a list of the board of directors, officers, and trustees for the past three years and any other person who the bidder knows will become officers, board members or trustees.

County Line Project –

NRG Energy, Inc. Board of Directors

- E. Spencer Abraham, Director
- Kirbyjon H. Caldwell, Director
- Lawrence S. Coben, Chairman of the Board
- Terry Dallas, Director
- Mauricio Gutierrez, Director
- William Hantke, Director
- Paul Hobby, Director / Finance and Risk Management Committee
- Edward Muller, Vice Chairman of the Board
- Anne Schaumburg, Director / Finance and Risk Management Committee
- Evan Silverstein, Director
- Barry T. Smitherman
- Thomas Weidemeyer, Director
- C. John Wilder
- Walter Young, Director / Audit Committee Member

MPX Project - Information on Con Edison's leadership and Board of Directors going back to 2007 can be found in our annual reports, available online here: <http://phx.corporate-ir.net/phoenix.zhtml?c=61493&p=irol-reportsannual>.

5.7 The bidder should demonstrate its ability (and/or the ability of its credit support provider) to provide the required security, including its plan for doing so.

County Line Project - NRG Energy has a corporate letter of credit ("LC") facility of [REDACTED] backed by a number of banks, including [REDACTED]. The facility is actively managed in order to provide credit support for projects in the development stage, as well as other corporate credit support needs. NRG Energy also has a cash balance of [REDACTED] as of December 2015. The required credit support (\$20,000 per MWh per hour) for the County Line Wind PPA is approximately [REDACTED]. We expect to use

a portion our LC capacity and cash balance for the County Line Wind PPA security and project development.

MPX Project – MPX and Con Edison have the ability to and will post the required security.

5.8 Provide a description of any current or recent credit issues/credit rating downgrade events regarding the bidder or affiliate entities raised by rating agencies, banks, or accounting firms.

County Line Project – To our knowledge, there are no current or recent issues or credit rating downgrade events.

MPX Project – To our knowledge, there are no current or recent issues or credit rating downgrade events involving Con Edison Transmission, Inc., or its parent, Con Edison, Inc.

As of July 17, 2017, Con Edison, Inc. has a senior unsecured debt credit rating of BBB+ from Standard & Poor's, A3 from Moody's, and BBB+ from Fitch. Updated credit ratings are available online here: <http://phx.corporate-ir.net/phoenix.zhtml?c=61493&p=irol-creditratings>.

5.9 Describe the role of the Federal Production Tax Credit or Investment Tax Credit (or other incentives) on the financing of the project.

County Line Project - [REDACTED]

MPX Project – N/A

5.10 Bidders must disclose any pending (currently or in the past three years) litigation or disputes related to projects developed, owned or managed by Bidder or any of its affiliates in the United States, or related to any energy product sale agreement.

County Line Project - We are involved in various legal proceedings, claims, investigations, and other legal matters which arise in the ordinary course of business. Although it is not possible to predict the outcome of these matters, we believe that the ultimate outcome of these proceedings, individually and in the aggregate, will not have a material adverse effect on our financial position, cash flows, or results of operations.

MPX Project – As discussed, per the terms of the RFP, MPX is not a “Bidder.” However, MPX volunteers the following Financial/Legal information for Item 5.10:

CET is not involved in any pending litigation or disputes. CET’s parent, Con Edison, Inc. is involved in various legal proceedings, claims, investigations, and other legal matters which arise in the ordinary course of business. Although it is not possible to predict the outcome of these matters, we believe that the ultimate outcome of these proceedings, individually and in the aggregate, will not have a material adverse effect on our financial position, cash flows, or results of operations.

5.11 What is the expected operating life of the proposed project? What is the depreciation period for all substantial physical aspects of the bid, including generation facilities, transmission lead lines to move power to the grid, transmission proposals, and mandatory and voluntary transmission system upgrades?

County Line – The expected operating life for the County Line Wind Project is 30 years.

MPX Project – The expected operating life of the MPX Project will be at least 40 years. The book depreciation of the transmission lines and converter stations will depreciate in 40 years and the substations in approximately 30 years, the tax depreciation of transmission lines will depreciate in 15 years and the substation within 20 years.

Regarding the Converter Stations, due to the fast development cycle in the IT industry, it is becoming common industry practice to replace/upgrade control and protection system hardware in HVDC stations after approximately 20-30 years. For example, the two HVDC stations delivered by ABB in New England in the 1980s (i.e., the Highgate back-to-back station in Vermont and the Sandy Pond converter station in Massachusetts), were recently upgraded by ABB with new state-of-the art computer systems. See **CONFIDENTIAL MPX Attachment 5.11** for additional information about HVDC stations around the world that have been upgraded by ABB.

HVDC station equipment warranties commence on the substantial completion date and typically continue for a period of thirty-six (36) months from the substantial completion date. However, the warranty period for any part or component of the work which is corrected, repaired or replaced is typically renewed for a period of twelve (12) months from the date of completion of such correction, repair or replacement. (In a limited number of projects, ABB has seen owner requirements for an equipment warranty period of up to 60 months.)

In addition to equipment warranties, HVDC station contracts typically do also include performance guarantees, including guarantees of real power delivery capacity, reactive power capacity, power losses, energy availability and failure rates for critical components. See **CONFIDENTIAL MPX Attachment 5.11** demonstrating typical performance guarantee terms for HVDC converter stations.

5.12 For projects that include new facilities or capital investment, has the bidder already obtained financing, or a commitment of financing, for the project? If financing has not been obtained, explain how obtaining a long-term agreement as proposed will help you in obtaining financing for the proposed project, in obtaining more favorable

terms for the financing of the proposed project, or in supporting the future capital investment.

County Line Project - NRG has not obtained for this project. As previously mentioned, NRG has relationships with financiers such as: [REDACTED]

[REDACTED] Executed financing agreements by such lenders rely on a long-term revenue commitment, such as a PPA. Thus, a PPA is the critical instrument for financing and building the Project. Additionally, the tenor of the PPA will influence the debt sizing, because longer tenors will provide more debt capacity.

MPX Project - As discussed, per the terms of the RFP, MPX is not a "Bidder." However, MPX volunteers the following Financial/Legal information for Item 5.12:

CET plans to use project finance to finance the MPX Project. CET has deep relationships with bank, bond and export credit sources of debt capital. The long-term revenue certainty provided by the RFP contract will enable Con Edison to secure the project finance debt on the most favorable terms for the MPX Project. Once the project has a signed contract, Con Edison will execute currently contemplated contracts for the engineering procurement and construction of the project. These contracts will contain provisions and risk transfer consistent with the financing requirements for large scale infrastructure projects. CET has worked closely with contract counterparties to ensure that vendor financing and export credit financing on favorable terms can be incorporated in our financing plan.

5.13 State whether the bidder or its affiliates have executed agreements with respect to energy, RECs and/or capacity for the project (including any agreements that have been terminated) and provide information regarding the associated term and quantities, and whether bidder has been alleged to have defaulted under or breached any such agreement.

County Line Project - NRG has not executed any long-term power sales agreement(s), or other agreements with respect to energy and/or capacity for the Project.

MPX Project – N/A

5.14 List all of the Bidder's affiliated entities and joint ventures transacting business in the energy sector.

County Line Project - As stated in 5.2, the responding entity, NRG Renew LLC, a subsidiary of NRG Energy, Inc., is primarily responsible for wind and solar development. The holding company has numerous SPVs, or project company subsidiaries, through which development and contracting activities are conducted.

MPX Project - As discussed, per the terms of the RFP, MPX is not a "Bidder." However, MPX volunteers the following Financial/Legal information for Item 5.12:

CET is partners with Grid NY, LLC, National Grid, plc's transmission subsidiary, in the New York Transco ("Transco"). Additional partners are Avangrid New York Transco, LLC, a subsidiary of AVANGRID, Inc. ; and Central Hudson Electric Transmission, a subsidiary of CH Energy Group, Inc. Transco owns and operates three transmission projects in New York State: Ramapo to Rock Tavern; Frasers-Coopers Corner; and Staten Island Unbottling. Transco is currently competing for additional transmission projects in New York State.

5.15 Has bidder, or any affiliate of Bidder, in the last five years:

- a. Consented to the appointment of, or was taken in possession by, a receiver, trustee, custodian or liquidator of a substantial part of its assets*
- b. Filed a bankruptcy petition in any bankruptcy court proceeding*
- c. Answered, consented or sought relief under any bankruptcy or similar law or failed to obtain a dismissal of an involuntary petition*
- d. Admitted in writing of its inability to pay its debts when due*
- e. Made a general assignment for the benefit of creditors*
- f. Was the subject of an involuntary proceeding seeking to adjudicate that Party bankrupt or insolvent*
- g. Sought reorganization, arrangement, adjustment, or composition of it or its debt under any law relating to bankruptcy, insolvency, or reorganization or relief of debtors?*

County Line Project - Neither NRG Energy, Inc. nor its wholly-owned subsidiary, NRG Renew LLC, has declared bankruptcy in the past five years, or engaged in any of the activities listed above.

MPX Project - As discussed, per the terms of the RFP, MPX is not a "Bidder." However, MPX volunteers the following Financial/Legal information for Item 5.15:

Neither MPX, Con Edison, Inc. nor its wholly-owned subsidiary, Con Edison Transmission, Inc., has declared bankruptcy in the past five years.

5.16 Briefly describe any known conflicts of interest between Bidder or an affiliate of Bidder and any Distribution Company, or any affiliates of the foregoing.

County Line Project – To our knowledge, there are no conflicts of interest between the Bidder or an affiliate of the Bidder and any Distribution Company, or any affiliates of the foregoing.

MPX Project – As discussed, per the terms of the RFP, MPX is not a "Bidder." However, MPX volunteers the following Financial/Legal information for Item 5.16:

There are no conflicts of interest between Con Edison or an affiliate of Con Edison and any Distribution Company, or any affiliates of the foregoing.

5.17 Describe any litigation, disputes, claims or complaints involving the Bidder or an affiliate of Bidder, against any Distribution Company or any affiliate of any Distribution Company.

County Line Project – To our knowledge, there are no litigation, disputes, claims or complaints involving the Bidder or an affiliate of the Bidder, relating to any Distribution Company or any affiliate of any Distribution Company.

MPX Project – As discussed, per the terms of the RFP, MPX is not a “Bidder.” However, MPX volunteers the following Financial/Legal information for Item 5.17:

To our knowledge, there are no litigation, disputes, claims or complaints involving MPX or an affiliate of MPX against any Distribution Company or any affiliate of any Distribution Company.

5.18 Describe any litigation, disputes, claims or complaints, or events of default or other failure to satisfy contract obligations, or failure to deliver products, involving Bidder or an affiliate of Bidder, and relating to the purchase or sale of energy, capacity or renewable energy certificates or products.

County Line Project - To our knowledge, there are no litigation, disputes, claims or complaints, or events of default or other failure to satisfy contract obligations, or failure to deliver products, involving the Bidder or an affiliate of the Bidder, relating to the purchase or sale of energy, capacity, or RECs.

MPX Project – As discussed, per the terms of the RFP, MPX is not a “Bidder.” However, MPX volunteers the following Financial/Legal information for Item 5.18:

To our knowledge, there are no litigation, disputes, claims or complaints, or events of default or other failure to satisfy contract obligations, or failure to deliver products, involving MPX or an affiliate of MPX, relating to the purchase or sale of energy, capacity, or RECs.

5.19 Confirm that Bidder, and the directors, employees and agents of Bidder and any affiliate of Bidder are not currently under investigation by any governmental agency and have not in the last four years been convicted or found liable for any act prohibited by State or Federal law in any jurisdiction involving conspiracy, collusion or other impropriety with respect to bidding on any contract, or have been the subject of any debarment action (detail any exceptions).

County Line Project - To our knowledge, the Bidder, and the directors, employees and agents of Bidder and any affiliate of Bidder are not currently under investigation by any governmental agency and have not in the last four years been convicted or found liable for any act prohibited by State or Federal law in any jurisdiction involving conspiracy, collusion or other impropriety with respect to bidding on any contract, or have been the subject of any debarment action.

MPX Project – As discussed, per the terms of the RFP, MPX is not a “Bidder.” However, MPX volunteers the following Financial/Legal information for Item 5.18:

MPX confirms that, to our knowledge, MPX, and the directors, employees and agents of MPX and any affiliate of MPX are not currently under investigation by any governmental agency and have not in the last four years been convicted or found liable for any act prohibited by State or Federal law in any jurisdiction involving conspiracy, collusion or other impropriety with respect to bidding on any contract, or have been the subject of any debarment action.

5.20 Identify all regulatory and other approvals needed by Bidder to execute a binding sale agreement.

County Line Project - NRG will not require any external regulatory or other approvals to execute a binding sale agreement. We will require an internal approval process, which will be initiated during the negotiation process, if selected.

MPX Project – MPX interprets the “Bidder” in this request to be the Clean Energy Generation supplier specifically and that it regards the sale of energy to the EDCs, in which case it is not relevant to MPX.

5.20 [sic] Describe how the project will conform to FERC’s applicable regulatory requirements, including, but not limited to, FERC requirements relating to allocation of transmission capacity and open access, the justness and reasonableness of rates, the potential for undue preference or discrimination, and affiliate dealings, if any. Describe how your proposed approach is consistent with FERC precedent and ratemaking principles.

County Line Project – N/A. Please see MPX’s response below.

MPX Project - On July 1, 2016, FERC issued an order (“July Order”)⁶ granting MPX’s application for authorization to charge negotiated rates for transmission rights on its proposed HVDC merchant transmission project, subject to the conditions outlined within the order. In evaluating MPX’s application, FERC’s analysis focused on four areas of concern: (1) the justness and reasonableness of the rates; (2) the potential for undue discrimination; (3) the potential for undue preference, including affiliate preference; and (4) regional reliability and operational efficiency requirements.⁷ FERC found that MPX met all four criteria and therefore, granted its application to provide transmission service over its HVDC project at negotiated rates. As a FERC-jurisdictional entity the MPX Project is subject to, among other things, Sections 205 and 206 of the Federal Power Act and FERC’s regulations and policies regarding merchant transmission facilities. In addition, as part of the FERC application process, MPX agreed to turn over operational control of its facilities to ISO-NE, file electric quarterly reports of their transactions, comply with all other affiliate rules, and abide by FERC’s Standards of Conduct to the extent any affiliate takes transmission service on the HVDC project.

⁶ See *Maine Power Express*, Order Granting Application for Authorization to Charge Negotiated Rates, Subject to Condition, and Granting Waivers, 156 FERC ¶61,002 (2016).

⁷ See *Chinook Power Transmission, LLC*, 126 FERC ¶ 61,134 (2009).

With regard to the post approval conditions outlined in the July Order, MPX must submit a subsequent compliance filing to FERC with the results of its capacity allocation process and seek an approval of that process by demonstrating that its open solicitation process and execution of contractual agreements were compliant with FERC's open access policies and precedent on merchant transmission facilities.⁸ In the event that MPX is successful in its bid submission to the DOER, MPX will submit a compliance filing to FERC detailing the MA RFP open solicitation process and demonstrating that MPX's allocation of transmission rights within the process is compliant with FERC's open access policies and precedent.

MPX is providing a copy of the July Order along with its response to this RFP. See **CONFIDENTIAL MPX Attachment 5.20** The July Order further details the MPX Project's compliance with all FERC regulatory requirements, precedent and ratemaking principles.

5.21 Describe and document any and all direct and indirect affiliations and affiliate relationships, financial or otherwise in the past three years between the bidder and one or more of the Distribution Companies and their affiliates, including all relationships in which one of the Distribution Companies has a financial or voting interest (direct or indirect) in the bidder or the bidder's proposed project. These relationships include:

- *Corporate or other joint arrangements, joint ventures, joint operations whether control exists or not*
- *Minority Ownership (50% or less investee)*
- *Joint development agreements*
- *Operating segments that are consolidated as part of the financial reporting process*
- *Related parties with common ownership*
- *Credit, debenture, and financing arrangements, whether a convertible equity feature is present or not*
- *Wholly owned subsidiaries*
- *Commercial (including real property) relationships with any Distribution Company*

County Line Project – To our knowledge, there have been no direct or indirect affiliations or affiliate relationships, financial or otherwise in the past three years, between the bidder and one or more of the Distribution Companies and their affiliates.

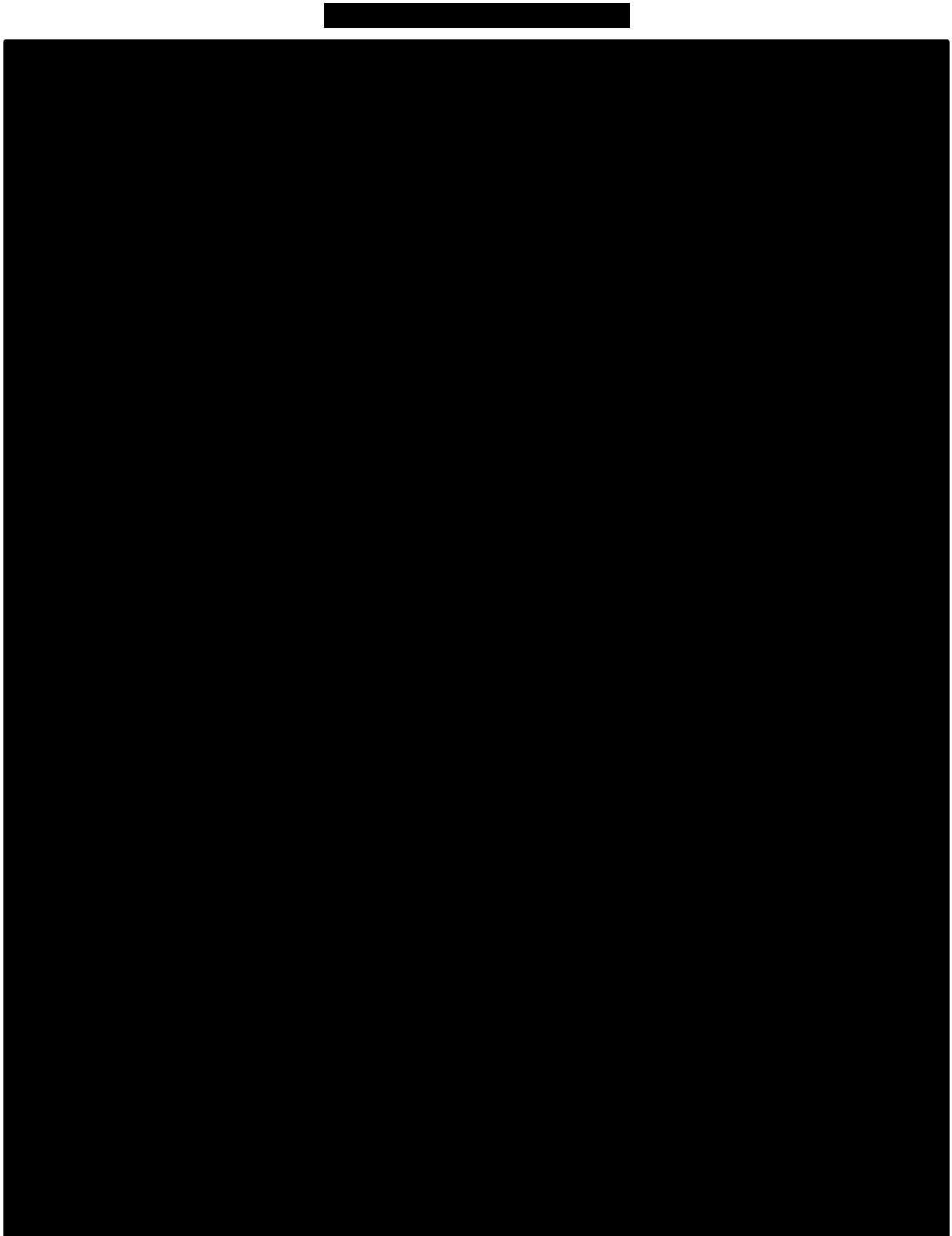
MPX Project – Unless otherwise disclosed in this section 5 there are no direct or indirect relationships between MPX and the distribution companies to our knowledge.

⁸ See *Allocation of Capacity on New Merchant Transmission Projects and New Cost-Based, Participant-Funded Transmission Projects*, 142 FERC ¶ 61,038 (2013).

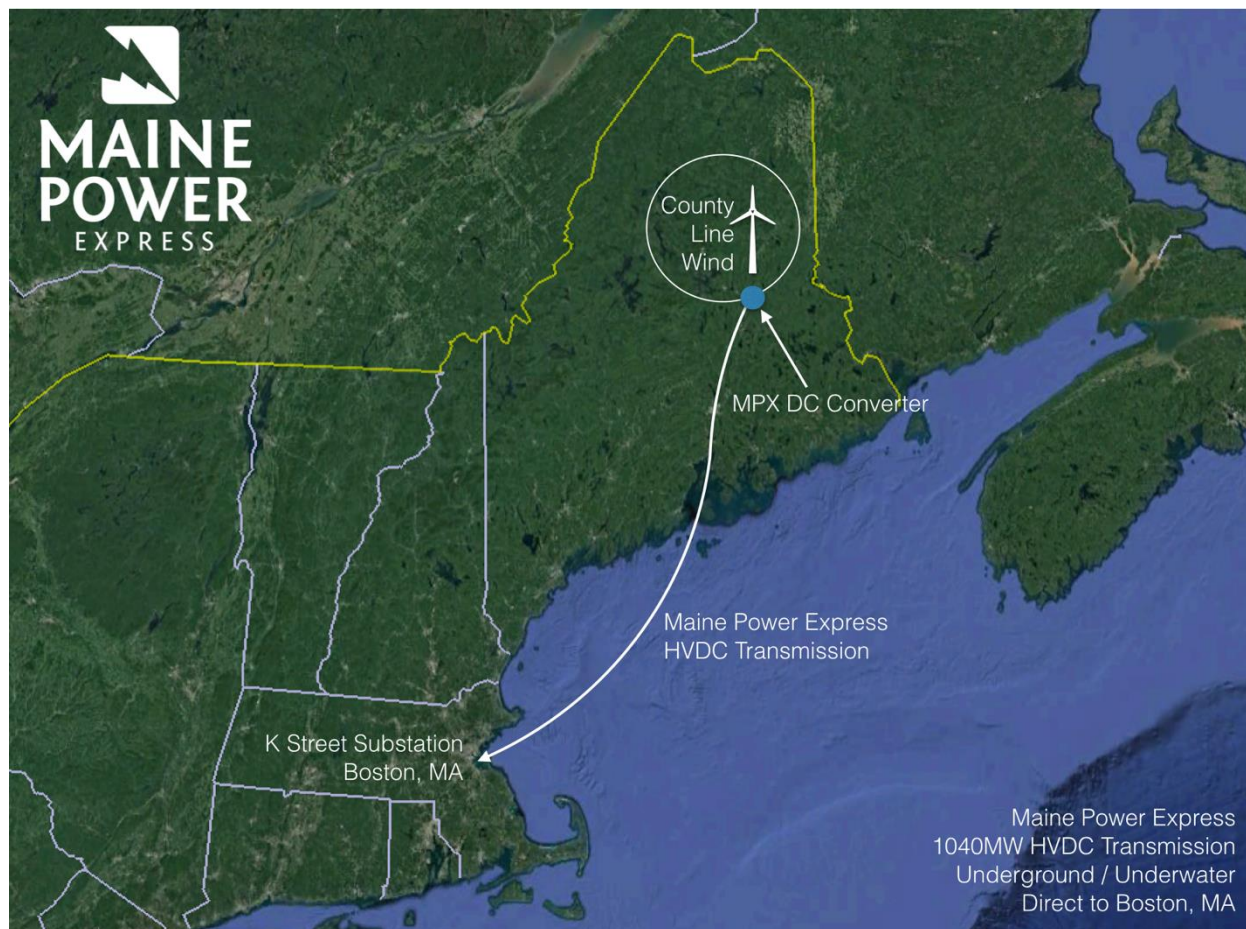
6. Siting, Interconnection, and Deliverability

6.1 Provide a site plan including a map of the site that clearly identifies the location of the Eligible Facility site and/or Transmission Project route, the assumed right-of-way width, the total acreage for Eligible Facilities, the anticipated interconnection point (or, if applicable, multiple points for a Transmission Project), and the relationship of the site to other local infrastructure, including transmission facilities, roadways, and water sources. In addition to providing the required map, provide a site layout plan which illustrates the location of all major equipment and facilities on the site.

County Line Project – The County Line Wind Project is located in eight different townships between Aroostook and Penobscot County in central Northern/Northeastern Maine. The local topography is generally rolling hills and Turbine strings follows a series of elevated ridgelines, with the Project's and The Project will consists of 150 wind turbines grouped in thirteen turbines strings running primary north to south across a series of elevated ridgelines the higher elevation areas. The landowner leases encompassed approximately 110,000 acres and in addition to wind development rights, the leases provide for the exclusive development rights to and construct all ancillary facilities such as the collection system, project transmission line, substation, and supporting infrastructure (e.g., O&M Building, access roads). The Project's point of interconnection, the MPX Northern Converter Station, is also located within land leased by County Line, which eliminates the need for third party easements to the point of interconnection. The map on the following page shows the current turbine layout and point of interconnection. The Project currently has far more land under site control than will ultimately be required for the 150 turbines, allowing for complete flexibility for layout optimization as wind data is collected and analyzed over the next 1-2 years.



MPX Project – Following is an overview, site plan and map of the MPX Project. For complete details, see **CONFIDENTIAL MPX Attachment 6.1**.



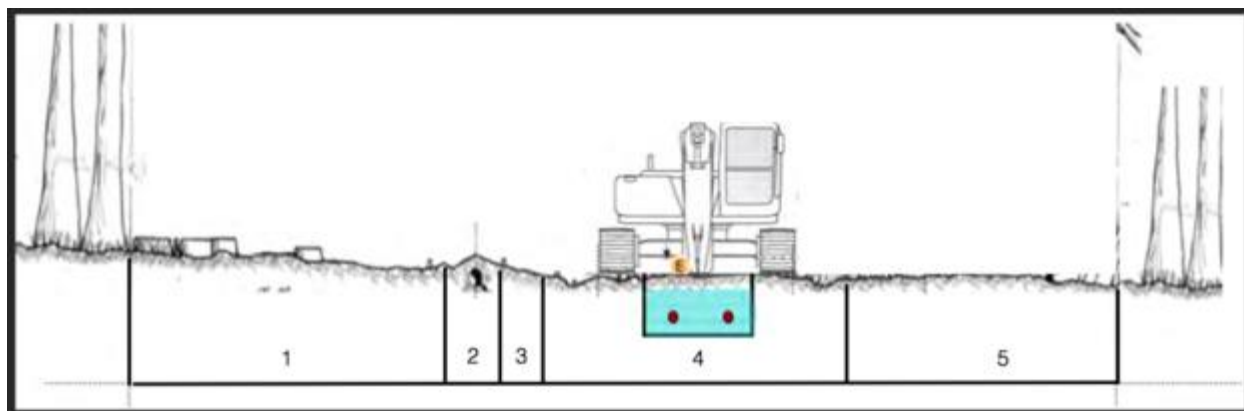
The MPX Transmission Infrastructure Project begins with an HVDC converter station located in Southern Aroostook County, ME. The converter station site is currently under control by the NRG County Line Project. The site is approximately 10 acres and includes a proposed new road and ROW from the project site to Route 2A. The site will include the MPX AC/DC Converter station, a switchyard to collect wind resources via generator leads, a potential new 345kV Switchyard connected to the existing 345kV line 396 (MEPCO), and a buried HVDC line to the Searsport-Loring Right-of-Way ("SL-ROW").

Beginning at the northern DC Converter station, two five-inch (5') HVDC transmission cables will head south, buried within the existing SL-ROW for 103 miles to Searsport.

The SL-ROW is a 200-mile long, 50-foot wide existing energy infrastructure corridor running between the Sprague Mack Point Intermodal Marine Terminal in Searsport, ME, and the Loring Commerce Centre, in Limestone, ME. MPX has secured exclusive rights to install underground HVDC electric transmission cables in the SL-ROW.



The SL-ROW is partitioned into 5 virtual lanes. The location of the existing pipeline defines the western and eastern borders of the SL-ROW, as illustrated in the diagram below.



The SL-ROW terminates at the tank farm located at the Mack Point Intermodal Marine Terminal. MPX has secured options from two separate local landowners for the continuation of the underground cables on the shore in Searsport joining the HVDC Submarine Cables within an underground Transition Vault.

The cable route leaves the Searsport coastline through Penobscot Bay to the Gulf of Maine into Massachusetts Bay and lands in Boston Harbor at the proposed Southern Converter Station site at the Massport Conley Terminal. The route was chosen based on a detailed analysis of existing cable crossings, shipping channels, fisheries and known obstructions and shipwrecks.

The sub-marine cables will join the land cable within an underground transition vault continuing into the converter station. The Southern DC/AC Converter Station is proposed on a 4-5 Acre site located on the eastern end of the Massport Conley Terminal in South Boston. The route into and through Boston Harbor was discussed in consultation with the U.S. Army Corps of Engineers.



After the energy is converted from DC to AC, 345kV lines will be either directionally drilled or installed in a duct bank from the Converter Station to the K Street Substation. The route from the Converter Station to K Street will depend on consultation with Massport, the MA EFSB, MA DOT and the results of the ISO-NE System Impact Study Process.



The MPX Project is the optimal route for connecting stranded energy resources in Northern Maine and Canada directly to the Boston load center with minimal environmental impact. The MPX project does not require unsightly transmission towers, utilizes an existing energy corridor, avoids the taking and clearing of lands and has no adverse impact to the marine environment.

6.2 Identify any real property rights (e.g., fee-owned parcels, rights-of-way, development rights or easements or leases) that provide the right to use the Eligible Facility site and/or Transmission Project route, including, for Eligible Facilities, and any rights of way needed for interconnection.

[REDACTED]

[REDACTED]

MPX Project –

1. Transmission: Maine	Comments
HVDC Converter Station Site Leasehold	10 Acre site located on land under lease by NRG as part of the generation site.
HVDC Subterranean Cable Route Leasehold, Right-of-Way, Easement	1) Sublease within the 200 Mile 50-ft wide Right-of-Way (780 easements in perpetuity) that runs from the former Loring Air Force Base in Limestone, Maine to Searsport, Maine known as the Searsport-Loring Corridor (2) Lease option within a 50-ft Right-of-Way that runs from the termination of the Searsport-Loring Corridor to the Shore in Searsport, Maine
HVDC Sub-sea Cable Route Conveyance – Standard Lease (will be obtained) State of Maine – Submerged Lands Act	Submerged Land Lease will be obtained under Maine Submerged Lands Act. 1.6 Conveyances: Standard Leases may be granted for: c. Pipelines, cables and similar linear structures which are 500 feet or more in length and one foot or more in width.

2. Transmission: Massachusetts	Comments
HVDC Converter Station Site Leasehold in process	Negotiations with the Massachusetts Port Authority to execute a long-term lease to locate the converter station on a 4-5 acre parcel of land on the eastern end of Conley Terminal in South Boston.
HVDC Subterranean Cable Route Easement in process	Negotiations with the Massachusetts Port Authority to execute a long-term easement to bury HVDC cables from the shore of Boston Harbor to the converter station on land on the eastern end of Conley Terminal in South Boston.
345kV AC Subterranean Cable Route	Permit to install the AC cables in East First Avenue will be obtained as part of the project permitting process.
HVDC Sub-sea Cable Route U.S. Army Corps of Engineers General Permit - GP 9. Utility (will be obtained)	New England District of the U.S. Army Corps of Engineers General Permit – GP 9. Utility Line Activities

3. Transmission: Federal Waters	Comments
HVDC Sub-sea Cable Route Commercial Lease (will be obtained)	Bureau of Ocean Energy Management Permit

- i. Does the project have a right to use the Eligible Facility site and/or Transmission Project route for the entire proposed term of the PPA or tariff (e.g., by virtue of ownership or land development rights obtained from the owner)?

County Line Project – The County Line leases have a 20 year term with a 20 year extension. The leases encompassed approximately 110,000 acres and in addition to wind development rights, the leases provide for the exclusive development rights to and construct all ancillary facilities such as the collection system, project transmission line, substation, and supporting infrastructure (e.g., O&M Building, access roads). The Project's point of interconnection the MPX DC Northern Converter Station is also located within land leased by County Line, which eliminates the need for third party easements to the point of interconnection. The terms of the lease are confidential; however, we have provided the cover sheets for your reference in **CONFIDENTIAL CL Attachment 6.2.**

MPX Project –

1. Transmission: Maine	Comments
HVDC Converter Station Site Leasehold	No, Lease to be obtained from NRG
HVDC Subterranean Cable Route Leasehold, Right-of-Way, Easement	Yes
HVDC Sub-sea Cable Route Conveyance – Standard Lease (will be obtained) State of Maine – Submerged Lands Act	No, Lease to be obtained

2. Transmission: Massachusetts	Comments
HVDC Converter Station Site Leasehold in process	No, Lease to be obtained
HVDC Subterranean Cable Route Easement in process	No, Permit to be obtained
345kV AC Subterranean Cable Route	No, Permit to be obtained
HVDC Sub-sea Cable Route U.S. Army Corps of Engineers General Permit - GP 9. Utility (will be obtained)	No, Permit to be obtained

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3. Transmission: Federal Waters	Comments
HVDC Sub-sea Cable Route Commercial Lease (will be obtained)	No, Lease to be obtained

ii. *If so, please detail the Bidder's rights to control the Eligible Facility site and/or Transmission Project route control*

County Line Project – County Line has land agreements with three large landowners covering turbine locations, access roads, project substation, transmission line and point of interconnection.

MPX Project –

1. Transmission: Maine	Comments
HVDC Converter Station Site Leasehold	N/A
HVDC Subterranean Cable Route Leasehold, Right-of-Way, Easement (1) Searsport-Loring Corridor: Sublease (2) Searsport-Loring Corridor: Follow-On Lease (3) Sprague Property, Searsport: Option (4) Savage Property, Searsport: Option	(1) See CONFIDENTIAL MPX Attachment 6.2 for Memorandums of Sublease filed in Aroostook, Penobscot and Waldo Counties, Maine (2) See CONFIDENTIAL MPX Attachment 6.2 for Memorandum of Follow-On Lease filed in Aroostook, Penobscot and Waldo Counties, Maine (3) See CONFIDENTIAL MPX Attachment 6.2 for Memorandum of Option filed in Waldo County, Maine (4) See CONFIDENTIAL MPX Attachment 6.2 for Memorandum of Lease filed in Waldo County, Maine
HVDC Sub-sea Cable Route Conveyance – Standard Lease (will be obtained) State of Maine – Submerged Lands Act	N/A

2. Transmission: Massachusetts	Comments
HVDC Converter Station Site Leasehold in process	N/A
HVDC Subterranean Cable Route Easement in process	N/A
345kV AC Subterranean Cable Route	N/A
HVDC Sub-sea Cable Route U.S. Army Corps of Engineers General Permit - GP 9. Utility (will be	N/A

obtained)	
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3. Transmission: Federal Waters	Comments
HVDC Sub-sea Cable Route Commercial Lease (will be obtained)	N/A

- iii. *Describe the status of acquisition of real property rights, any options in place for the exercise of these rights and describe the plan for securing the necessary real property rights, including the proposed timeline. Include these plans and the timeline in the overall project timeline.*

County Line Project – County Line has land agreements with three large landowners covering turbine locations, access roads, project substation, transmission line and point of interconnection.

MPX Project –

1. Transmission: Maine	Comments
HVDC Converter Station Site Leasehold	10 Acre site located on land under lease by NRG, the wind generator as part of this bid submission. The site has been identified and a lease will be negotiated with NRG.
HVDC Subterranean Cable Route Leasehold, Right-of-Way, Easement (1) Searsport-Loring Corridor: Sublease (2) Searsport-Loring Corridor: Follow-On Lease (3) Sprague Property, Searsport: Option (4) Savage Property, Searsport: Option	N/A – Answered in 6.2 (ii) above
HVDC Sub-sea Cable Route Conveyance – Standard Lease (will be obtained) State of Maine – Submerged Lands Act	Submerged Land Lease will be obtained under Maine Submerged Lands Act which is a prescriptive right and administrative process. 1.6 Conveyances: Standard Leases may be granted for: c. Pipelines, cables and similar linear structures which are 500 feet or more in length and one foot or more in width.

2. Transmission: Massachusetts	Comments
HVDC Converter Station Site Leasehold in process	Negotiations with the Massachusetts Port Authority to execute a long-term lease to locate the converter station on a 4-5 acre

6. Siting, Interconnection, and Deliverability

	<p>parcel of land on the eastern end of Conley Terminal in South Boston. [REDACTED]</p> <p>[REDACTED] It is expected that the option agreement will be finalized and approved by the Massport board by the end of 2017.</p>
HVDC Subterranean Cable Route Easement in process	<p>Negotiations with the Massachusetts Port Authority to execute a long-term easement to bury HVDC cables from the shore of Boston Harbor to the converter station on land on the eastern end of Conley Terminal in South Boston. [REDACTED]</p> <p>[REDACTED] It is expected that the easement agreement will be finalized and approved by the Massport board by the end of 2017.</p>
345kV AC Subterranean Cable Route	<p>Permit to install the AC cables in East First Avenue will be obtained as part of the project permitting process.</p>
HVDC Sub-sea Cable Route U.S. Army Corps of Engineers General Permit - GP 9. Utility (will be obtained)	<p>New England District of the U.S. Army Corps of Engineers General Permit – GP 9. Utility Line Activities. Representatives of the project have held preliminary meetings with ACOE and the permit will be obtained as part of the permitting process.</p>

3. Transmission: Federal Waters	Comments
HVDC Sub-sea Cable Route Commercial Lease (will be obtained)	Bureau of Ocean Energy Management Commercial Lease will be obtained as part of the Permitting process.

iv. Identify any joint use of existing or proposed real property rights

County Line Project – The Project is located on large tracts operated for timber production. The forest management operations have created a extensive system of logging roads that will be used to the greatest extent possible in developing the Project to reduce cost and environmental impacts.

MPX Project –

1. Transmission: Maine	Comments
HVDC Converter Station Site Leasehold	Site is leased by Generation Partner NRG. MPX facilities will be co-located with NRG facilities.

6. Siting, Interconnection, and Deliverability

HVDC Subterranean Cable Route Leasehold, Right-of-Way, Easement	None
HVDC Sub-sea Cable Route Conveyance – Standard Lease (will be obtained) State of Maine – Submerged Lands Act	Sub-sea Cable may be co-located with other submerged land uses.

2. Transmission: Massachusetts	Comments
HVDC Converter Station Site Leasehold in process	Co-located on Massport land within the Conley Terminal Facility
HVDC Subterranean Cable Route Easement in process	Co-located on Massport land within the Conley Terminal Facility
345kV AC Subterranean Cable Route	AC cables will be co-located in East First Avenue with other utilities.
HVDC Sub-sea Cable Route U.S. Army Corps of Engineers General Permit - GP 9. Utility (will be obtained)	Sub-sea Cable may be co-located with other submerged land uses.

3. Transmission: Federal Waters	Comments
HVDC Sub-sea Cable Route Commercial Lease (will be obtained)	Bureau of Ocean Energy Management Commercial Lease will be obtained as part of Permitting process.

6.3 Provide evidence that the Eligible Facility site and/or Transmission Project route is properly zoned or permitted. If the Eligible Facility site and/or Transmission Project route is not currently zoned or permitted properly, identify present and required zoning and/or land use designations and permits and provide a permitting plan and timeline to secure the necessary approvals.

Detail the zoning and permitting issues:

County Line Project – County Line is located within an expedited wind permitting zone – an area identified as appropriate for utility-scale wind energy development as defined under Maine Statute 35-A M.R.S.A. §3451-3458 – and is sited to maximize energy generation while minimizing impacts to ecological and environmental resources.

MPX Project –

- Northern DC Converter – Rural Business Development Zone
- Upland route in SL-ROW – An existing energy corridor
- Searsport ROW – Zoned for industrial/transportation operations
- Maine submarine route –
 - The Maine Coastal Program (MCP), which is part of the MDACF, was created by the State of Maine and approved by the National Oceanic and Atmospheric Administration (NOAA) in

6. Siting, Interconnection, and Deliverability

1978, pursuant to the federal Coastal Zone Management Act of 1972 (CZMA). The program provides funding for policy initiatives, technical assistance, and enforcement of state laws that affect the coastal zone in Maine. One component of this program is the authority of the state to review certain federal actions that affect the coastal zone to ensure that these activities are consistent with the enforceable state policies that have been made a part of the Maine Coastal Program. This review process is generally known as **Federal Consistency Review** for the CZMA.

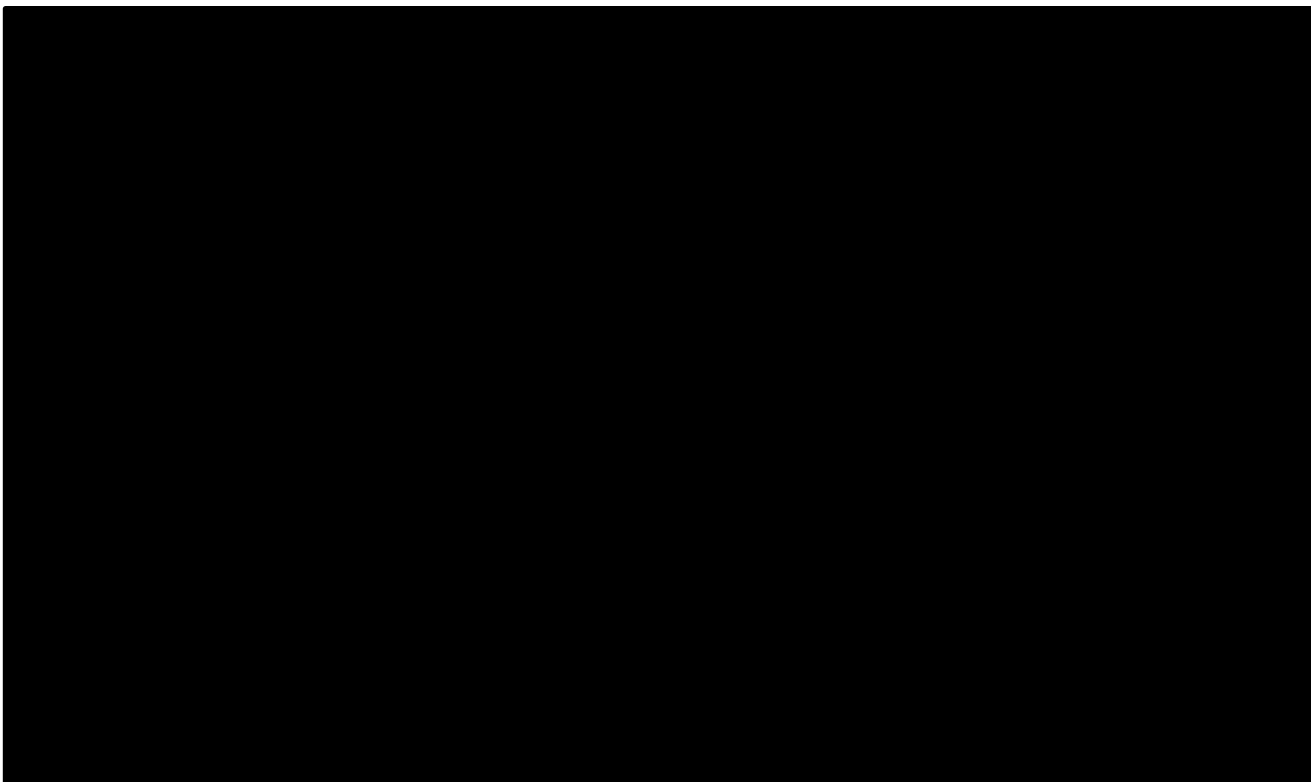
- Federal actions subject to federal consistency review include activities proposed by a non-federal applicant for which a federal license or permit is required, whether within or outside the coastal zone, affecting any land or water use or natural resource of the coastal zone. A federal license or permit, or other form of federal approval, certification or authorization, may not be issued until the state concurs that the proposed activity is consistent with the enforceable policies of the Maine Coastal Program.
- Federal Submarine Route – TBD
- Massachusetts submarine route -
 - Massachusetts Office of Coastal Zone Management (MassOCZM).
 - According to the procedures set forth at 301 CMR 21.0, federal activities or development projects are subject to federal consistency review if they are development projects that include activities conducted by the applicant requiring a federal permit/license.
 - The MPX Project will require one or more federal permits; therefore, the MPX Project will be subject to a **Federal Consistency Review** under the CZMA. Upon review and concurrence of a federal consistency certification, the MassOCZM, which is part of the EOEa, shall issue the applicant a statement of Federal Consistency Concurrence.
- Massport – Zoned for industrial/transportation operations

As of the date of this filing, MPX is unaware of any zoning issues associated with siting of the project. MPX has retained TRC as an environmental and permitting consultant. TRC has prepared a detailed Permitting Overview Document (“POD”) and it is included as **CONFIDENTIAL MPX Attachment 6.3**. Per the POD, MPX is in the process of meeting with all relevant regulatory agencies for all necessary zoning and permitting applications and approvals.

Permitting plan and timeline:

County Line Project – The details and timeline for securing all permits required to construct the Project are detailed in Section 7.

MPX Project – The MPX Project timeline, including permitting, is below. The permitting plan is provided in **CONFIDENTIAL MPX Attachment 6.3** which provides a more detailed discussion of these regulatory approvals. See also Section 7.



Start Date:

County Line Project – Start Date: Start Date: While preliminary studies, seasonal surveys and meetings are underway, County Line will commence full formal permitting efforts upon selection in this RFP, 1Q 2018.

MPX Project – Start Date: Preliminary meetings have been held with key regulatory agencies, see **CONFIDENTIAL MPX Attachment 6.3**. MPX will commence full formal permitting efforts upon selection in this RFP, Approx. Q1 2018.

End Date:

County Line Project – End Date: Assuming an Q1 2018 Start Date, County Line expects Permitting to be Complete by Q2 2020.

MPX Project – End Date: Assuming an Q1 2018 Start Date, MPX expects Permitting to be Complete by Q4, 2019.

6.4 Provide a description of the area surrounding the Eligible Facility site and/or Transmission Project route, including a description of the local zoning, flood plain information, existing land use and setting (woodlands, grasslands, agriculture, other).

County Line Project - The Project site is located on lands that are actively managed for timber, ranging in elevation from approximately 500 to 700 feet. The Project area is located in

the Central and Northern region dominated by Early Successional and Spruce-Northern Hardwood forests. Large plantations of red pine, red spruce, and European larch are interspersed throughout the forests along the ridgeline. Any impacts to floodplains will be reviewed as part of the State permitting process explained in Section 7.

MPX Project - The northern converter station for the MPX Project will be located in southern Aroostook County, Maine, a rural, woodlands setting designated as a Rural Business Development Zone by the Maine Land Use Planning Commission ("LUPC"). Nearby land uses include agricultural and forestry operations. The site is outside of the floodplain region.

The terrestrial portion of the MPX Project will be installed in an existing and maintained energy corridor. Portions of the route fall within floodplain areas but the cable will be buried so installation will not pose a flooding hazard. A variety of land uses occur on either side of the corridor.

The sub-sea in-water portion of the cable installation will be buried in State and Federal navigable waters.

The Southern converter station is currently proposed to be located on the Eastern end of the Massport Conley Terminal in Boston, MA. The existing land uses are primarily related to the transport of goods. The converter site is located approx. 1.5 miles from the K Street Substation. The proposed converter station site is not used for active port operations due to height restrictions associated with nearby Logan Airport and structural conditions of the pier.

6.5 For Eligible Facilities, describe and provide a map of the proposed interconnection that includes the path from the generation site to the ISO New England Inc. ("ISO-NE") Pool Transmission Facilities ("PTF"). Describe how the bidder plans to gain interconnection path site control.

Interconnection map included?

County Line Project – As described in Section 6.2, the MPX Northern Converter Station is located on land currently held under Easement by NRG, directly adjacent to the proposed layout. Thus, no additional site control is required by the Generator to reach the point of interconnection. Please see the MPX response below, and in the sections above, for more detail on site control to the point of delivery.

MPX Project – The MPX Project controls a majority of "the path from the generation site to the ISO-NE PTF." MPX has provided a map from the interconnection point of the County Line Project with the MPX Project to the interconnection at the K Street Substation PTF in Section 2, and 6.1. For additional detail, see **CONFIDENTIAL MPX Attachment 6.5**.

Interconnection site control plan

County Line Project – Please see the MPX response below.

MPX Project – MPX is currently engaged with ISO-NE and Eversource regarding the interconnection site control necessary for the MPX Project under Queue Position 506. **See CONFIDENTIAL MPX Attachment 6.6**

6.6 Please describe the status of any planned interconnection to the grid. Has the bidder made a valid interconnection request to ISO-NE, the applicable New England Transmission Owner, or any neighboring control areas, to interconnect at the Capacity Capability Interconnection Standard? Have any studies been completed by ISO-NE or the applicable Transmission or Distribution Owner? If multiple interconnection requests have been made, please specify all such active requests which have not been superseded by subsequent requests and information regarding the status of each. Provide copies of any requests made and studies completed. Describe how such studies and information support the costs assumed in preparing your bid and the associated timeline proposed.

County Line Project- County Line is ideally located at the origination point of the MPX line. In fact, the MPX AC to DC Northern Converter Station is located on land leased for the wind farm. An Interconnection Request ("IR") for Capacity Network Resource Interconnection Service to MPX and ISO-NE was filed on March 4, 2014 and the Project was assigned Queue Position [REDACTED]. After discussing with the ISO, it was determined that NRG would also need to file an IR for the County Line project, for delivery to K Street via MPX. That application has been submitted and deemed complete, with a queue position assignment pending at the time of submission (the ISO has been inundated with late IRs). We anticipate that the QP# will be provided on or before the bid due date of July 27. Once updated, the IR will appear in the queue as a 630 MW resource interconnecting to K Street. We do not anticipate the generator as having any incremental impact on the system, and that the MPX SIS will be the critical study for this proposal.

MPX Project - MPX submitted a revised Elective Transmission Upgrade ("ETU") request to ISO-NE in 2015. The ETU was assigned Queue position #506. In June 2017, ISO-NE provided MPX with a Draft System Impact Study. See **CONFIDENTIAL Attachment 6.6**.

6.7 Describe the Project's electrical system performance and its impact to the reliability of the New England Transmission system. For Transmission Projects provide a description of how the project would satisfy ISO NE's I.3.9 requirements. Provide the status of any interconnection studies already underway with ISO-NE and/or the transmission owner. Provide a copy of any studies completed to date. Provide a copy of an interconnection agreement, if any, executed by the bidder with respect to the proposed project. If an interconnection agreement has not been executed, please provide the steps that need to be completed before an interconnection agreement can be executed and the associated timeline.

County Line Project – See the response to Section 6.6. The Project does not have a completed SIS or interconnection Agreement at this time. We expect the Interconnection Agreement to be executed by Q2 2018.

County Line and MPX will enhance the reliability of the system by adding incremental energy, diversity and capacity to the generation resources of the ISO-NE region. Further project impact will be studied as part of the interconnection studies by ISO-NE. The Project will meet the minimum interconnection standards set by ISO-NE and will satisfy the I.3.9 requirements.

MPX Project – See section 3.3 and **CONFIDENTIAL MPX Attachment 6.6**

6.8 Projects that do not have I.3.9 approval from ISO-NE must include technical reports or system impact studies that approximate the ISO-NE interconnection process, including but not limited to clear documentation of study technical and cost assumptions, reasoning, and justification of such assumptions. All studies must assume the project will interconnect using the Capacity Capability Interconnection Standard, must use the current ISO-NE interconnection process (including network impact scenarios from multiple projects interconnecting), and must also detail any assumptions with respect to projects ahead of the proposed project in the ISO-NE interconnection Queue and any assumptions as to changes to the transmission system that differ from the current ISO-NE Regional System Plan. Please include a scenario analysis that shows how changes in the project interconnection Queue could impact interconnection costs.

County Line Project - The Project does not have an alternate point of interconnection at this time.

MPX Project – See **CONFIDENTIAL MPX Attachment 6.6**.

6.9 To the extent that you provide an alternative interconnection scenario based on ISO-proposed interconnection process changes, you must also include studies using the proposed ISO-NE-proposed process. Any such studies must be accompanied with clear documentation of study technical and cost assumptions, reasoning, and justification of such assumptions.

County Line Project – The Project does not have an alternate point of interconnection.

MPX Project – MPX does not propose an alternative interconnection scenario.

6.10 Provide the electrical models of all energy resources supporting the proposed project in accordance with the filing requirements of the ISO-NE Tariff Schedule 22 and 23.

Electrical models attached:

County Line Project – See **CONFIDENTIAL CL Attachment 6.11 and 6.13** for County Line's detailed Collection System and One-Line diagrams. The PSSE model will be generated and provided to the ISO closer to the Coordination Meeting.

MPX Project – N/A, MPX is neither a large generator (Schedule 22) nor a small generator (Schedule 23).

6.11 Provide a copy of an electrical one-line diagram showing the interconnection facilities and the relevant facilities of the transmission and/or distribution provider.

Electrical one-line diagram attached:

County Line Project – An electrical one-line diagram is included as **CONFIDENTIAL CL Attachment 6.11**.

MPX Project – See attached **CONFIDENTIAL MPX Attachment 6.6** for a one-line diagram of the K Street Interconnection.

6.12 Specify and describe the current or new interconnection facilities (lines, transformers, switching equipment, system control protection, etc.) that bidder owns or is intending to construct or have constructed in order to deliver the proposed energy.

County Line Project – The Project will interconnect to a new substation at the origination point of the MPX line, known as the MPX AC to DC Northern Converter Station. The MPX Project will convert the AC power to DC for delivery underground and underwater to ISO-NE at the K Street Substation in Boston, MA.

MPX Project – MPX proposes an expansion of the existing K Street 345kV Substation. Please see **CONFIDENTIAL MPX Attachment 6.6**.

6.13 Incremental data requirements for Projects that include Transmission facilities:

IDV file(s) in PSSE v32 format modeling only the new/modified Transmission components of the project:

County Line Project – The County Line PSSE model will be generated and shared with the ISO prior to the Coordination Meeting.

MPX Project – See **CONFIDENTIAL MPX Attachment 6.13**.

If the Bidder does not use PSSE, provide in text format necessary modeling data as follows:

Line Data:

- *Voltage:*
- *Thermal Ratings*
- *Impedances (r, X and B):*
- *Line Length (bus numbers and names):*

Transformer Data (including Phase shifting transformers if applicable):

- *Terminal Voltages*
- *Thermal Ratings*
- *Impedance*

- *From, to*

Reactive compensation models as necessary

Other changes to the model that would occur due to a Project such as terminal changes for lines/transformer/generator leads/loads etc.

6.14 Please detail with supporting information and studies (as available) that the energy contemplated in your proposal is able to be delivered to the Distribution Companies without material constraint or curtailment.

County Line Project - The County Line Project will interconnect with the nearby MPX Project Northern DC Converter Station in southern Aroostook County, ME. The MPX Project will convert the AC power to DC for delivery underground and underwater to ISO-NE at the K Street Substation in Boston, MA.

MPX Project - The primary advantage of the MPX Project is the complete bypass of all transmission constraints in Maine. As an HVDC line interconnecting directly into K Street Substation in the city of Boston, the MPX Project bypasses the major transmission constraints in Maine, Massachusetts and New England as a whole. Wind generated in Maine and imports from New Brunswick interconnecting to the existing AC system are limited by constraints at the Orrington-South and Surowiec-South interfaces in Maine and the Maine-New Hampshire and the North-South interface along the northern Massachusetts border. These constraints are the subject of the ISO New England 2015 Economic Study Strategic Transmission Analysis – Onshore Wind Integration dated September 2, 2016.

The MPX Project is not subject to these constraints, and power flowing over the HVDC line into Boston will never be limited due to any constraints on the ISO New England (“ISO-NE”) transmission system. Further, Interconnecting the MPX Project at the K Street Substation in Boston will require upgrades to the current configuration of the substation, thereby enhancing reliability at K Street and greater Boston area. See **CONFIDENTIAL MPX Attachment 6.14**.

6.15 Please provide sufficient information and documentation to demonstrate that the proposed point of delivery into ISO-NE, along with their proposed interconnection and transmission upgrades including any transmission upgrades beyond the point of interconnection, is sufficient to ensure full dispatch of the proposal’s Clean Energy Generation profile.

County Line Project - The County Line Project will interconnect with the nearby MPX Project Northern DC Converter Station in southern Aroostook County, ME. The MPX Project will convert the AC power to DC for delivery underground and underwater to ISO-NE at the K Street Substation in Boston, MA. The fact that the project is not subject to either of the Maine Cluster Study processes, and will have a dedicated delivery route directly to Boston should be a substantial advantage over our competitors delivering to a Northern New England node.

MPX Project – The Overlapping Impact Test in the FCM process will ultimately determine the deliverability and dispatch capability of the County Line Project.

7. Environmental Assessment, Permit Acquisition Plan and New Class I RPS Certification

7.1 Provide a list of all the permits, licenses, and environmental assessments and/or environmental impact statements required. If a bidder has secured any permit or has applied for a permit, please identify in the response.

- i. Provide a list of all Federal, state and local permits, licenses, and environmental assessments and/or environmental impact statements required to construct and operate the project.

County Line Project – NRG has hired Stantec, a proven environmental consulting company, to analyze environmental and permitting concerns relating to the CL Project. Please see their report, provided as **CONFIDENTIAL CL Attachment 7.1.i**, for further information regarding the information requested in Section 7.

County Line Project - List of Required Permits

Permit	Agency	Trigger	Timeline	Application Review
Federal				
Determination of No Hazard (Will be presumed determination of hazard for turbines over 500 feet)	Federal Aviation Administration ("FAA")	Structures over 200 feet	Not yet filed.	60-90 days
Section 401 Wetlands Permit	US Army Corp of Engineers ("USACE")	Permit required if project will result in wetland or stream impacts	Not yet filed. Note: Process of obtaining this permit includes section 7 consultation with US Fish and Wildlife Service	1 year

7. Environmental Assessment, Permit Acquisition Plan and New Class I RPS Certification

State				
Site Law/Natural Resources Protection Act ("NRPA")/401 Water Quality Cert./Construction General Permit	Maine DEP	Primary permit required for the Project.	Not yet filed.	185 days if no public hearing held. 270 days if there is a public hearing.
Land Use Planning Commission ("LUPC") Certification	Maine LUPC	LUPC will certify through the MDEP process that the Project meets their land use standards	The certification is incorporated into the Site Law permitting decision and is not a separate approval; typically provided to MDEP in 90 days	N/A (it is incorporated into the Site Law permitting decision and is not a separate approval)

MPX Project – List of Required Permits, etc.

MPX has selected TRC to provide environmental and permitting consulting services for the MPX Project. TRC has prepared a detailed Permit Overview Document for the MPX Project. Preliminary consultations have been conducted with certain key regulatory agencies, but to date, no permit applications have been submitted. See **CONFIDENTIAL MPX Attachment 7.1.** for information on permitting details.

Regulatory Authority	Permit/ Approval	Description	Trigger
U.S. Army Corps of Engineers (USACE)	Section 404 Permit	Required for the discharge of dredged or fill material into Waters of U.S.; generally filed as a Joint Application with USACE and MDEP. USACE will determine if Project qualifies for Maine Programmatic Permit or Individual Permit (IP)	Presence of waters of the U.S., including wetlands and streams that will be impacted by the Project. May also require compensatory mitigation.

7. Environmental Assessment, Permit Acquisition Plan and New Class I RPS Certification

Regulatory Authority	Permit/ Approval	Description	Trigger
	Section 401 Permit (WQC)	Under Section 401 of the CWA, states have the authority to review and approve, condition, waive, or deny WQC for any activity that is subject to a Federal permit or license and may result in a discharge to waters of the United States. Maine has a joint state and federal permitting process for WQC based on extent and quality of impacted water resources. The Maine Department of Environmental Protection (MDEP) will typically issue the WQC with demonstration of compliance with Maine's Natural Resources Protection Act (NRPA).	Under §401 CWA, a federal agency cannot issue a permit or license for an activity that may result in a discharge to waters of the U.S. until the state or tribe where the discharge would originate has granted or waived §401 WQC.
	National Environmental Policy Act (NEPA)	NEPA requires federal agencies to integrate environmental values into decision-making by considering the environmental impacts of proposed actions and reasonable alternatives to those actions through the NEPA process. NEPA review is most commonly triggered by the need for federal review of a project (with the exception of categorically exempt actions such as nationwide permits from USACE), disturbance of federally-managed lands, and interconnection with federal transmission entities.	Federal actions requiring a NEPA review will be based on the NEPA implementing regulations for the subject federal agency. Examples include issuance of a major federal permit, release of federal land, or disturbance of land managed by a federal agency, interconnection with federal transmission entity
Bureau of Ocean Energy Management (BOEM)	Right-of-way grant	Section 388 of the Energy Policy Act of 2005 amended the Outer Continental Shelf (OCS) Lands Act by adding subsection 8(p), which authorizes the Department of Interior (DOI) BOEM to grant leases, easements, or ROWs on OCS lands for activities that produce or support production, transportation, or transmission of energy from sources other than oil and gas. ROW grant authorizes the holder to install cables, pipelines, and associated facilities.	Required when installing energy facilities in federal waters.
U.S. Fish and Wildlife Service (USFWS); National Marine Fisheries Service (NMFS)	ESA Consultation and Incidental Take Permit; Marine Mammal Protection Act; Magnuson-Stevens Fishery Conservation and Management Act;	Regulates activities affecting federally- threatened and endangered species. If it is determined that a project could impact marine mammals, an applicant would need to apply for an Incidental Harassment Authorization (IHA) pursuant to Section 101 (a)(5)(A-D) of the Marine Mammal Protection Act. The Magnuson-Stevens Fishery Conservation and Management Act sets forth Essential Fish Habitat provisions to identify and protect important habitats of federally managed	If the Project will potentially impact federally protected species and/or habitat, or requires a federal permit (e.g. Section 404 Permit) or federal funding, then USFWS and/or NMFS must be contacted

7. Environmental Assessment, Permit Acquisition Plan and New Class I RPS Certification

Regulatory Authority	Permit/ Approval	Description	Trigger
	Fish and Wildlife Coordination Act	marine and anadromous fish species. The Fish and Wildlife Coordination Act requires that all federal agencies consult with NMFS, USFWS, and state fish and wildlife agencies when proposed actions might result in modification of a natural stream or body of water.	
U.S. Environmental Protection Agency (EPA)	Spill Prevention and Counter-measure Control (SPCC) Plan	Would be required if any facility associated with the Project (operations and maintenance building [O&M] or substation) has a tank holding more than 1,320 gallons. A copy of the plan will need to be maintained on file with the owner/operator and reviewed by the certifying engineer every five years.	Oil storage of more than 1,320 gallons of oil
U.S. Coast Guard	Private Aid to Navigation Permit	To ensure the safety of the boating public the Coast Guard is required to review all work performed within the navigable waters of the United States and determine whether or not such work (i.e. installation of a fixed structure or floating object) will require to be marked with Private Aid to Navigation.	Required when working in navigable waters.
Federal Regulatory Energy Commission (FERC)	Market-Based Rate Authorization	Prior to commissioning of the facility, rates must be reviewed and authorized by FERC. Power marketers get market-based rate approval through an order issued by FERC accepting the power marketer's rates. Rates are permitted to go into effect after 60 day notice to FERC and to the public (i.e., 61 days after the filing date).	Interconnection with federal transmission line.
Independent System Operators of New England (ISO-NE)	ISO-NE Planning Procedure 5-1; Generation and Transmission Facilities Proposed Plan	A transmission line that connects a new generator to the ISO-NE grid needs ISO-NE approval.	New Generation and/or Interconnection with the ISO-NE grid.

7. Environmental Assessment, Permit Acquisition Plan and New Class I RPS Certification

Regulatory Authority	Permit/ Approval	Description	Trigger
Maine Department of Environmental Protection (MDEP)	Site Location of Development (Site Law)	Maine's Site Law applies to developments with the potential to have a substantial effect on the environment as identified by the Legislature. Developments that fall into this category include projects occupying more than 20 acres, large structures and subdivisions, and oil terminal facilities. A permit is issued if the project meets applicable standards addressing areas such as stormwater management, groundwater protection, infrastructure, wildlife and fisheries, noise, and unusual natural areas.	Projects occupying more than 20 acres of development.
	Natural Resources Protection Act (NRPA)	A permit is required when an activity is located in, on, or over the following protected natural resources: rivers and streams, great ponds, fragile mountain areas, freshwater wetlands, significant wildlife habitat, coastal wetlands, and coastal sand dune systems. In some cases a permit is required when working within 75 feet of NRPA protected natural resources. Project proponents would have to apply either for an individual NRPA permit, a Tiered review for minimal impact Projects, or submit a Notice of Intent for coverage under Permit By Rule (PBR) standards if the action is not expected to significantly affect the environment (if carried out according to the standards contained in Chapter 305 of DEP regulations). If the activity involves dredging, construction of structures, and other work in navigable waters of the United States, the DEP will forward the application to the USACE for additional review.	Proposed activity (as defined by the NRPA) is in, on or over, or within 75 feet of, an NRPA protected natural resource. May also require compensatory mitigation.
	General Construction Permit (MGCP)	Under delegated authority from the EPA, the Maine General Construction Permit (MGCP) is Maine's general permit for the National Pollutant Discharge Elimination System (NPDES) program which regulates activities that may result in polluted discharges into waters of the United States. The MGCP authorizes the direct discharge of stormwater associated with construction activity to waters of the state other than groundwater, provided that the discharge meets the requirements of the general permit and applicable provisions of Maine's waste discharge and water classification statutes.	Construction activity resulting in the direct discharge of stormwater into waters of the state.
	Water Quality	Under Section 401 of the Clean Water Act, an	Construction in navigable

7. Environmental Assessment, Permit Acquisition Plan and New Class I RPS Certification

Regulatory Authority	Permit/ Approval	Description	Trigger
	Certificate	applicant for a federal license or permit to conduct an activity that may result in a discharge to a navigable water of the United States or wetland must supply the federal licensing authority with a certification from the state that any such discharge will comply with state water quality standards.	waterway.
Maine Land Use Planning Commission (LUPC)	Site Law certification project review	For projects in unorganized territories of the State, before the MDEP can grant the Site Law permit, the applicant must demonstrate to the LUPC that the project is an allowed use in the subdistricts the project is located within, and that the project complies with applicable land use standards established by LUPC.	Submittal of Site Law Application within LUPC territory.
Maine Department of Agriculture, Conservation, and Forestry (MDACF)	Submerged Lands Lease	If an activity involves state-owned submerged lands (below mean low water) and requires an Individual NRPA Permit, the activity may require a lease or easement from the Submerged Lands Program, which is part of the MDACF Division of Parks and Public Lands	Utilization of state-owned submerged lands.
Maine Historic Preservation Commission (MHPC) acting as State Historic Preservation Officer (SHPO)	Maine SHPO Review/Maine DEP No Adverse Effects Standards under Site Law (Chapter 375, Preservation of Historic Sites)	Concurrence with Maine SHPO that the Project will not adversely affect protected cultural resources performed concurrent with Maine DEP's Site Law review. Consultation with SHPO is always recommended as early as possible in the Project development process to determine need and scope of Section 106 Consultation.	Potential impacts to cultural resources. If the Project requires a federal permit (e.g. Section 404 or 401 Permit, NEPA), or Maine Site Law Permit, Section 106 review will be initiated with the Maine SHPO through consultation and/or Phase I surveys and reports
Maine Coastal Program (MCP)	Federal Consistency Review	A federal license or permit, or other form of federal approval, certification or authorization, may not be issued until the state concurs that the proposed activity is consistent with the enforceable policies of the Coastal Zone Management Act for that state.	Construction in coastal navigable waterway.
Maine Public Utilities Commission (MPUC)	Certificate of Public Need and Convenience	Before constructing a transmission line of 100 kV or higher, a T&D utility must receive a Certificate of Public Convenience and Necessity (CPCN) from the MPUC.	Transmission line $\geq 100\text{kV}$.

7. Environmental Assessment, Permit Acquisition Plan and New Class I RPS Certification

Regulatory Authority	Permit/ Approval	Description	Trigger
Massachusetts Energy Facility Site Board (EFSB)	Certificate of Environmental Impact and Public Interest	The EFSB reviews the need for, cost of, and environmental impacts of transmission lines, natural gas pipelines, facilities for the manufacture and storage of natural gas, and oil facilities.	Transmission line.
Massachusetts Environmental Policy Act (MEPA) Office	Secretarial Certificate	The Secretary will issue a Secretarial Certificate upon the determination that the documents adequately describe and analyze the Project and its alternatives and adequately assessed its potential environmental impacts and mitigation measures.	Project meets or exceeds MEPA review thresholds.
Massachusetts Department of Environmental Protection (MassDEP)	Chapter 91 Waterways License	The Massachusetts Public Waterfront Act requires a Chapter 91 waterways license or permit for any activity located in, under, or over flowed tidelands, filled tidelands, Great Ponds and certain non-tidal rivers and streams located throughout Massachusetts.	Construction in identified waterway areas.
	401 Water Quality Certification	The MassDEP must certify that projects requiring federal permits will not violate the state's water quality standards, which include protection for wetlands.	Construction in navigable waterway.
Massachusetts Division of Fisheries and Wildlife (MassDFW)	Consultation under Massachusetts Endangered Species Act and the Wetlands Protection Act	In order to protect rare species and their habitats, NHESP Natural Heritage and Endangered Species Program (NHESP) reviews projects and activities proposed within Estimated or Priority Habitat. Proponents with projects and activities proposed within Priority Habitats of Rare Species and Estimated Habitat of Rare Wetlands Species must file with NHESP for review and approval.	Construction in potential Priority Habitat
Massachusetts Historical Commission (MassHC)	M.G.L. Chapter 9, sections 26-27C.	Any projects that require funding, licenses, or permits from any state agency must be reviewed by the MassHC to ensure project complies will applicable laws and regulations.	Request for state permit.
Massachusetts Office of Coastal Zone Management (MassOCZM)	Federal Consistency Review	A federal license or permit, or other form of federal approval, certification or authorization, may not be issued until the state concurs that the proposed activity is consistent with the enforceable policies of the Coastal Zone Management Act for that state.	Construction in coastal navigable waterway.

- ii. *Identify the governmental agencies that will issue or approve the required permits, licenses, and environmental assessments and/or environmental impact statements.*

County Line Project –

Federal Permitting

FAA Determination of No Hazard

Preliminary airspace analysis indicates these Determinations should be granted within 60-90 days.

State Permitting

MDEP will authorize construction and operation activities under three statutory provisions:

- Site location of development, natural resource protection act
- A water quality certificate (if applicable)
- A construction general storm water permit

In making its determination under the statutory provisions above, MDEP will evaluate the Project based on the following key criteria:

Wetlands

The Project critical issue analysis indicated few wetland systems throughout the project area. For those that exist, initial wetland delineations have begun and it is likely that most impacts can be avoided through careful project design. All segments of the project area will be delineated for wetlands and vernal pools. The Project will be designed to avoid resources to the maximum extent possible and will utilize a network of pre-existing roads to reduce impacts. If resource impacts are unavoidable, an application to the U.S. Army Corps of Engineers will be submitted and mitigation for these impacts will be proposed.

Wildlife

All field surveys for wildlife will be completed per a work plan created in collaboration with U.S. Fish and Wildlife Service and Maine Department of Inland Fisheries and Wildlife. NRG has extensive experience with wildlife surveys and will tailor these studies based on highest risk species within the project area. Preliminary results from the Project critical issue analysis show several inland Wading Bird and Waterfowl Habitats located in the general vicinity of the project, but none within areas identified for potential turbine locations or likely access roads. No Deer Wintering Areas are located within the vicinity of the project.

Stormwater

The civil design and the design of stormwater infrastructure and protected buffers will be done such that the Project will meet the standards required for the issuance of a construction stormwater permit by MDEP.

Soils

All investigative soil work required to finalize the Project design and satisfy the MDEP standard will be completed as part of the environmental resource assessments for the Project.

Local Permitting

A Utility Line Permit and a Road Opening Permit issued by the Maine Department of Transportation may be required; these permits are typically issued in 2 weeks. A Site Law Certification to ensure that setbacks to property lines and other resources are met will be required by the LUPC. Since the Project is proposed within the unorganized territories, the LUPC certificate serves as the zoning entity. This certification will be incorporated into the MDEP permitting process. All affected towns will be involved throughout development of the Project.

MPX Project – See response in 7.1.i.

7.2 Provide the anticipated timeline for seeking and receiving the required permits, licenses, and environmental assessments and/or environmental impact statements. Include a project approval assessment which describes, in narrative form, each segment of the process, the required permit or approval, the status of the request or application and the basis for projection of success by the milestone date. All requirements should be included on the project schedule in Section 10.

County Line Project - This project will require state and federal approvals, as noted above, and are anticipated in the timelines indicated. For reference, the chart below reflects what we believe to be an aggressive, but achievable timeline for completing all necessary studies and filing/obtaining all permits. As further discussed in Section 10, there is considerable float in this schedule, which still allows us to achieve COD alongside the completion of the MPX line.



The primary permitting requirements will be through the Maine Department of Environmental Protection (DEP) for state permitting and the Maine office of the New England District of the Army Corps of Engineers (Corps).

The DEP provides coordinated permitting---one permit application---for siting, zoning and resource impacts associated with the project. Maine's Site Location of Development Act, Natural Resources Protection Act, Wind Energy Act and Stormwater Law, and associated regulations, are the vehicles DEP uses to evaluate impacts associated with a wind project. In addition, Maine's Land Use Planning Commission's (LUPC) zoning review, Water Quality Certification and NPDES Construction General Permits are all administered through the coordinated DEP permitting process.

With more than a dozen projects in operation, Maine has a well-developed process and standards for review and permitting wind projects. Consultations with agencies will occur prior to application filing, and DEP will solicit and coordinate review by other relevant agencies (e.g., historical preservation, wildlife). The extensive DEP review includes these key topics, among others:

- Wetland impact;
- Wildlife and habitat impact;
- Sound, flicker and visual impact;
- Decommissioning;
- Stormwater design, buffer preservation and groundwater impacts; and
- Tangible benefits the project bring to the community, and to Maine

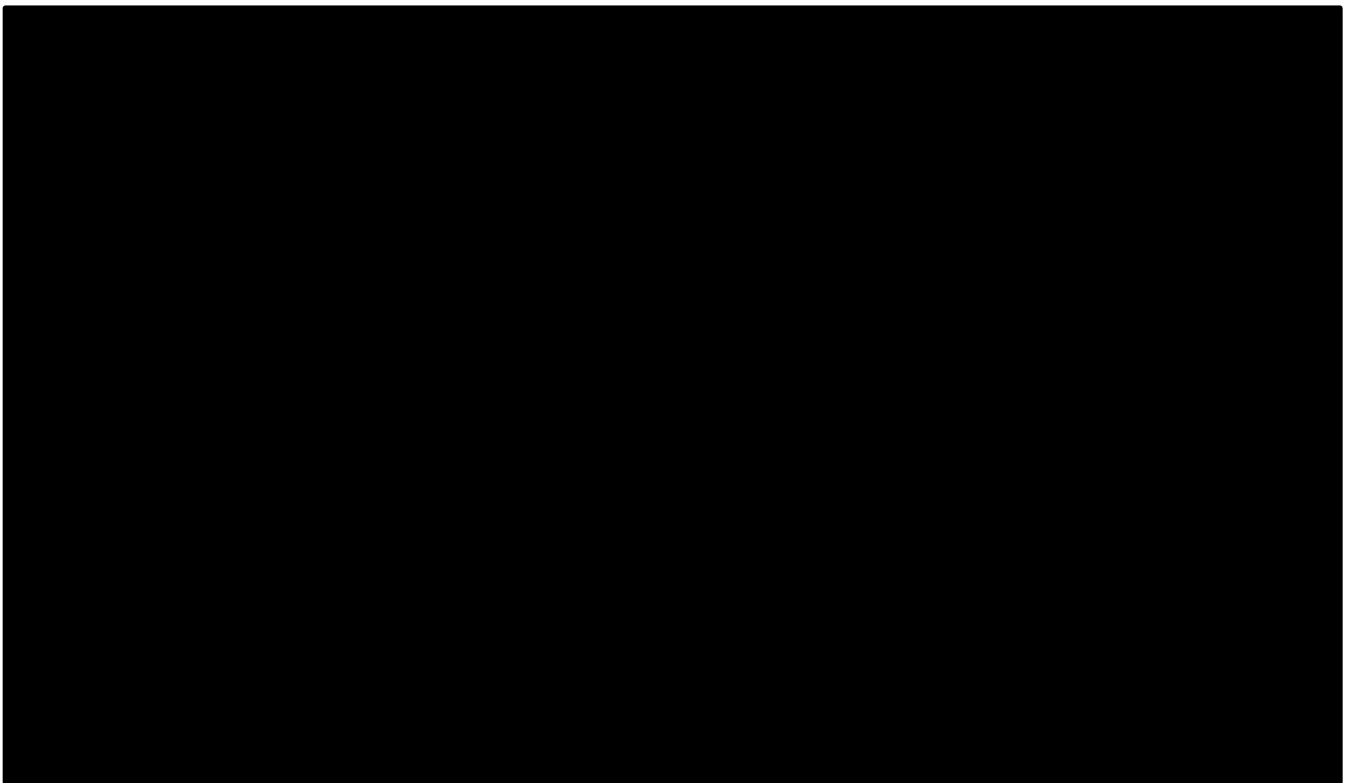
For technical issues with which the DEP does not have substantial inhouse expertise, like sound and visual impact, the DEP will hire a third-party evaluator to review the work provided in the application and any public comment received on the project.

Sound, visual and wildlife impacts are the major issues common to wind development in Maine. Evaluation of sound impacts will include a careful survey of dwellings near the project to determine where there may be potential receptors. And initial desktop evaluation indicated the area is sparsely populated (Figure 3). Visual analysis will include the preparation of simulations and a Visual Impact Assessment that evaluates the impact of the project on Maine's identified scenic resources. A desktop analysis indicates there are a few designated scenic resources within 8 miles, Maine's regulatory limit for visual impact analysis for wind projects (Figure 5). Wildlife field studies have yet to be completed, but a desktop analysis shows few identified wildlife habitats in or near turbine locations (Figure 4).

The path for timely and successful state permitting of this project will be early and often consultation with DEP and other key agencies to identify and resolve major issues prior to application submission.

At the federal level, Corps permitting under Section 404 of the Clean Water Act for impacts to jurisdictional wetland and waterways will be the primary regulatory vehicle. That process will work in tandem with Maine's review of the project, and will incorporate USFWS review under the Endangered Species Act, Migratory Bird Treaty Act and the Bald and Golden Eagle Protection Act; Section 106 historical evaluation; and tribal consultation. As with state permitting, early and often consultation with the Corps and USFWS is the method for achieving a timely and successful permit process.

MPX Project – The timeline for seeking and receiving approval for all permits, licenses and environmental assessments and/or environmental impact statements is June 2017 through Q4 2019. See chart below.



For a project approval assessment refer to the Permit Overview Document in **CONFIDENTIAL MPX Attachment 7.1 (POD)**. Regarding the status of approvals, while pre-consultations meetings have been held, to date no permits or license applications have been submitted. The basis for the projection of success is based on the proven track record of TRC and their successful permitting efforts of similar projects, the limited environmental impact of the ROW and careful planning of stakeholder outreach to be conducted. See Section 10.1 for additional detail as requested.

7.3 Provide a preliminary environmental assessment of the site and project, including both construction and operation, as applicable. In addition, the bidder should identify environmental impacts associated with the proposed project, any potential impediments to development, and its plan to mitigate such impacts or impediments. The analysis should address each of the major environmental areas presented below, as applicable to the proposed project:

County Line Project- NRG has hired Stantec, a proven environmental consulting company, to analyze environmental and permitting concerns relating to the CL Project. Please see their report, provided as **CONFIDENTIAL CL Attachment 7.3**, for detailed information regarding NRG and Stantec's environmental assessments.

MPX Project – MPX has retained TRC for all environmental assessment activities. Please see **CONFIDENTIAL MPX Attachment 7.1 (POD)** for a complete overview of the permitting process plan for the MPX Project.

The following are **County Line Project's** responses to items i-xii:

i. *Impacts during site development*

The Project is located in Eastern Maine and is very sparsely populated, made up almost exclusively of commercial forestland. The area has been heavily harvested and substantial haul roads and forest skid roads network the turbine area. This network of roads and ongoing strategic harvesting will allow NRG to minimize new impacts on the site, which would primarily be associated with both temporary and permanent impacts would be associated with the construction of the County Line Wind Project. Expected impacts would include those associated with vegetation clearing, grading, filling, and blasting. These activities would all be planned and managed carefully to comply with all local, state and federal requirements, and as part of project development and design, NRG would develop a comprehensive restoration plan for the site. In general, this would include specifications for seeding and planting to stabilize exposed soils area of temporary disturbance. Seeding and planting specifications would be established based on site-specific conditions (e.g., in upland or wetland areas). Seeded and planted areas would be protected with mulch, netting, or other biodegradable matting to minimize desiccation of vegetation or potential erosion. These areas would be watered and fertilized, as needed to ensure success. A qualified environmental scientist would conduct regular monitoring of restored areas to monitor the success of restoration. Corrective measures would be implemented if monitoring determines that the site restoration is not meeting the restoration objectives.

Please see **CONFIDENTIAL CL Attachment 7.1.i**, pages 3 and 4, for further information.

ii. *Transportation infrastructure*

The County Line Wind Project area includes an existing network of commercial logging roads. Development of the project would require construction of new private access roads, and improvement of existing logging roads that would be used for project access. The project

access roads would be gravel and constructed to accommodate the expected construction equipment. Stormwater controls and drainage systems associated with the access roads would be detailed as part of a required stormwater management plan.

Transportation of turbine and electrical collector line components to the project area would occur via interstate, state, and local roadways. Upgrades to existing public roadways are not expected to be necessary, and the applicant would repair damage to roadways or bridges resulting from delivery of project components or other aspects of project construction and operation, as it would be utilizing the same transportation pathway that was used during the construction of Oakfield Wind. All deliveries for the Oakfield project were made without any additional clearing, improvements or repairs required. In the event that any of these remediation activities are required in this case, NRG would take on this responsibility at its expense.

iii. Air quality impacts

Operation of the County Line Wind Project would not negatively impact air quality. Wind energy generation facilities such as the County Line Wind Project can in effect indirectly improve air quality by producing power without generating air pollution that is associated with the combustion of carbon-based fuels.

The construction phase of the project could cause temporary negative impacts to air quality, including vehicle exhaust, dust from unpaved roads, and smoke if cleared debris is burnt. Because the project is located in a rural landscape, these effects would be minimal. Again, this land is already being utilized for commercial logging, so there is regular traffic from heavy vehicles coming in and out of the site today. In addition, these local effects would be limited in duration because construction activities would shift across the large project area. Nuisance dust would be the most likely form of air emission, and BMPs would be used to mitigate these effects. As needed, roads could be treated with calcium chloride, water, or other approved dust control agents. In addition, construction road entrances at public roads would have crushed stone pads to limit dust emissions and the mud tracking of mud onto roadways. Construction of some project components such as electrical collection lines would be unlikely to generate nuisance dust because duff, leaves, and organic matter on the ground surface will reduce dust generation.

There are no sources of emissions associated with the operation of the project that would require an air license. If cleared debris is burnt, a local burn permit would be acquired.

iv. Access to water resources/water quality impacts

The County Line Wind Project area consists primarily of commercial forestland with wetlands and watercourses of various sizes located across the landscape. Generally, turbines and most other project infrastructure would be sited away from surface water resources. However, linear project components such as access roads, crane paths, and electrical corridors may cross or be located within the vicinity of these resources.

Vegetation clearing and the construction of impervious surfaces could potentially increase surface water runoff and alter local drainage patterns. To protect water quality, a stormwater management plan would be developed, vegetated buffers would be established adjacent to surface water resources, and erosion and sedimentation control measures would be implemented. Stormwater modeling, including assessments of peak flows, would be completed, as needed, to determine appropriate stormwater management needs. To the extent practicable, stormwater runoff measures would function to maintain natural drainage patterns. Typical stormwater measures including culverts, ditch turnouts, or level spreaders would be installed to maintain hydrologic conditions. Vegetated buffers located between construction activities and water resources would serve to protect water quality by providing stormwater and phosphorous treatment, shading, and erosion control.

A water quality monitoring plan also would be developed, as appropriate, in consultation with the Maine Department of Inland Fisheries and Wildlife (IFW). This monitoring plan would document pre- and post-construction physical and biological conditions in potentially affected streams. In general, this would include monitoring water quality before, during, and for three years following construction of the project.

Additional information can be found in the Natural Resource map in **CONFIDENTIAL CL Attachment 7.1.i**.

v. Ecological and natural resources impacts

For detailed information regarding County Line's impacts on wetlands, botanical resources, invasive species, eagles, raptors, migratory birds, bats, and other wildlife species of concern, please see **CONFIDENTIAL CL Attachment 7.1.i**.

vi. Land use impacts

The area is privately owned and the land is primarily used for commercial timber production. With construction of the project, commercial forestry activities will continue on the land surrounding the project. Construction of new access roads and improvements to existing logging roads also could improve timber harvesting opportunities. Commercial timber companies have traditionally allowed public access for recreational activities such as hunting and snowmobiling. For safety and security reasons, public access would be restricted within the County Line Wind Project area when construction is ongoing. Upon completion of construction, continued public access for recreation would likely continue as allowed by the landowners. Outreach to local recreational organizations such as snowmobile and ATV clubs would provide information about how the area is currently used and how the project could affect future use. Historically, wind developers in Maine have been able to effectively work with these interest groups to support continued access to the site during the operational phase of the projects, and have thus been able to enjoy the support of these organizations through the permitting process.

vii. Cultural resources

In proximity to the County Line Wind Project there are:

- Two national natural landmarks
- Five historic sites
- Three scenic great ponds
- Three scenic river segments
- Four conservation lands
- Four tribal lands

Potential impacts to cultural resources would primarily involve visual impacts to off-site resources. A Visual Impact Assessment (VIA) would be completed to further evaluate potential visual impacts to cultural resources.

Due diligence studies related to cultural resources would be completed prior to construction. These studies would be done to further identify and evaluate potential cultural resources within the project area and would include a historic architecture survey, a pre-contact archaeological survey, and a Euro-American archaeological survey. Requests for information related to cultural resources also would be sent to local Native American tribes/bands. In addition, consultation with the State Historic Preservation Office would be completed to determine the potential impact of the project on nationally listed historic resources, and historic resources of state importance.

Additional information can be found in the Cultural Resource map in **CONFIDENTIAL CL Attachment 7.3**.

viii. Previous site use (e.g., greenfield, brownfield, industrial, etc.)

The County Line Wind Project is a greenfield site with past land use consisting primarily of commercial forestry with a network of roads associated with timber harvesting activities.

ix. Noise level impacts

The County Line Wind Project is located in a relatively rural and undeveloped area. The project itself would be located on land that has primarily been used for commercial forestry operations. The surrounding landscape is lightly populated with few structures (buildings with roofs and an associated road or driveway) identifiable from aerial photographs. Structures are concentrated in two areas on the larger landscape and appear to be associated with small farms or homesteads. The remaining structures are scattered on the landscape and appear to be primarily seasonal camps.

Sound (noise) associated with the construction phase of the project would include equipment operation and potentially blasting. The construction phase would occur during normal daylight working hours so project generated sound would be confined to these hours. Sound generated during the operation of the project would primarily be from turbines, and less commonly from other equipment used for operation and maintenance. The operational phase would involve both daytime and nighttime sound generation.

Wind energy developments in Maine must meet sound standards and decibel levels at protected locations, and at the project limits. A sound level assessment using predictive modelling would be completed to determine if the anticipated sound levels exceed statutory requirements during daylight and evening hours. If needed, sound level mitigation would be implemented for unavoidable sound impacts from the project. It is not expected that the County Line Wind Project would result in undue adverse impacts due to sound generation.

x. Aesthetic/visual impacts

Based upon a desktop analysis there are two national natural landmarks, three scenic great ponds, three scenic river segments, four conservations lands, and five historic sites in proximity of the County Line Wind Project. The two national natural landmarks are Crystal Bog and Mountain Katahdin, which is also the terminus of the Appalachian National Scenic Trail, and is located approximately 24 miles to the west of the project. The three significant, scenic lakes that fall within approximately six miles of the project are Salmon Stream Lake, Mattawamkeag Lake, and Pleasant Lake. The two significant, scenic rivers are the East and West Branches of the Penobscot River, and the nearest point to the project along these rivers is at approximately three miles. The four conservation lands located closest to the County Line Wind Project include two parcels managed by the Maine Bureau of Parks and Lands, and the Ganther's Landing Scenic Area and Salmon Stream Lake Scenic Area. The five historic sites are the A. B. Leavitt House, the Medway Congregational Church, the William Sewall House, the Island Falls Opera House, and the Bible point state historic site. These sites are all within approximately five miles of the County Line Wind Project. Three of the historic sites are located to the north, one to the east, and one to the southeast of the project.

Maine regulates scenic impact from wind projects, including those located in proximity to the County Line Wind Project. Potential scenic impacts would be evaluated through a VIA. The VIA would evaluate both designated scenic resources, and other scenic resources on public land or visited by the public. The VIA would include visual and computer-based analyses, site inventory, photographic review, and visual simulations to evaluate potential impacts. If the VIA determines that the project might result in unavoidable visual impacts, visual mitigating measures would be implemented. It is not expected that the County Line Wind Project would have an undue adverse impact on scenic resources.

xi. Transmission infrastructure impacts

The proposed electrical collector line would extend from the turbine area to an interconnection point along an existing transmission corridor to the southeast of the County Line Wind Project. The collector line would cross through a predominantly forested landscape that includes wetlands confined primarily within both linear and isolated topographic basins. The landscape also includes watercourses that range from small tributaries to larger perennial streams.

Construction of the collector line would require clearing of woody vegetation and project operation would require continued vegetation maintenance within an approximately 150-foot wide corridor. The collector line would be maintained as an herbaceous and shrub-dominated community with trees and shrubs removed before they reach heights of 10 feet or more. Based

upon NWI data, the collector line would likely cross wetlands and watercourses. Permanent filling of wetlands or alterations of the natural watercourse channels is not anticipated for construction of the collector line. However, if the collector line crosses forested wetlands these communities would be permanently converted forested cover to an emergent or scrub-shrub communities. It also may be necessary to cross wetlands during construction, which would involve temporary fill in the form construction mats.

Industry-applicable BMPs would be implemented to minimize potential adverse impacts to sensitive natural resources. These BMPs would include the establishment of buffers restricting or prohibiting certain construction and maintenance activities in proximity to sensitive resources such as streams and certain wildlife habitats. For example, the operation of mechanized equipment for clearing activities could be restricted within certain buffers or the application of herbicide could be prohibited within specific buffers. The MDEP or Corps could require compensatory mitigation for unavoidable impacts to natural resources such as wetlands, streams, and certain wildlife habitats. The amount and type of required compensatory mitigation would be established through negotiations between the applicant and the regulatory agencies.

xii. Fuel supply access, where applicable

Fuel supply access would not be applicable to the County Line Wind Project.

*The following are the **MPX Project** responses to items i-xii.*

i. Impacts during site development

There are not expected to be any impacts to environmental resources during the pre-application and application review stage of the Project, other than soil and benthic sampling. Impacts associated during construction are discussed within the individual resource areas below.

ii. Transportation infrastructure

The MPX Project will intersect or potentially intersect with two transportation networks: marine vessels and road and railways.

Marine Navigation Corridors

The proposed transmission cable route crosses a number of navigation corridors along the marine component of the Project. During MPX Project construction, the presence and operation of the cable installation vessels will create elevated noise levels, increased turbidity, and additional vessel traffic. These impacts to commercial and recreational waterways would be minor and temporary. Following installation of the cables, the cable corridor will be plotted on nautical charts with associated restrictions imposed on vessel anchorage. The proposed route avoids designated anchorage areas, so the overall effect is expected to be minor. Impacts from the magnetic properties of the transmission line on mechanical navigational compass readings are not expected to be significant.

Railroads/Roads

Railroad/roadway effects associated with construction activities would be generally minor, temporary, and localized. The transportation of equipment and construction materials is expected to only slightly and temporarily increase the overall volume of traffic on local roadways. Delivery of oversized equipment by trucks will be coordinated so as to minimize effects to traffic flow and the surrounding community.

Where paved roadways are encountered, it is anticipated that the HVDC transmission cables will be installed underneath the paved roadway utilizing HDD techniques or installed within the established right-of-way. HDD techniques are designed to install linear infrastructure in a way that avoids disturbance of existing surficial features. As a result, minimal disruption of existing traffic patterns is anticipated during the cable installation process. For gravel roadways, it is anticipated that the HVDC transmission cables will be buried within an excavated trench across the roadway. Following installation, the gravel roadway will be restored to its previous or better condition. Nearby residences and businesses may experience temporary disturbance and traffic inconvenience associated with construction activities but these effects will be temporary and, in general, most disturbances will last only a brief period of a few days or a week at any particular location.

Once operational, the converter station will be mainly controlled remotely by operations staff. Traffic associated with routine periodic inspections and maintenance activities will represent a

negligible increase in the average daily traffic volumes. Once installed, the cables will be buried and pose no obstacle to the normal operation of the road network.

iii. Air quality impacts

Minimal temporary influences on air quality may result from MPX Project-related construction activities, such as exhaust from construction vehicles and dust generated by construction activities along unpaved areas. Residents and businesses in the area adjacent to construction activities may experience slightly higher levels of fugitive dust and air emissions during construction, but these effects will generally be minimal. There will be no increase in air pollution from the operation or maintenance of the converter station. There will be some minor traffic associated with maintenance of the transmission system, but it will not increase air emissions significantly.

iv. Access to water resources/water quality impacts

As previously discussed, during MPX Project construction the presence and operation of the cable installation vessels will create elevated noise levels, increased turbidity, and additional vessel traffic. These impacts to commercial and recreational waterways would be minor and temporary.

During construction activities for the overland portion, potential short-term effects on water quality may be caused by localized increases in turbidity and downstream sedimentation resulting from trenching within inland waterbodies. Sediment may also be introduced into waterbodies due to runoff of sediment-laden stormwater from adjacent construction areas and/or soil stockpiles. To avoid erosion and sedimentation from nearby construction land disturbance into waterbodies, temporary and permanent erosion control measures will be installed along the construction corridor and adjacent to soil stockpiles, as needed. Similarly, temporary and permanent erosion control measures will also be used when clearing riparian vegetation adjacent to waterbodies within the construction corridor for trenching and cable installation activities. Stream banks will be restored, stabilized, and seeded once construction is completed. In some cases, crossings of large waterbodies may require use of horizontal directional drilling (HDD) techniques to allow installation without trenching or other surface disturbances.

Installation of the submarine transmission cables will temporarily result in localized impacts to water quality during construction due to the temporary localized increases in turbidity (a measurement of the cloudiness or amount of total suspended sediment in water) resulting from the resuspension of sediments from trenching and disturbance within the waterbody. The extent of sediment suspension will depend on the density and size of the sediment, as well as the hydrodynamic characteristics of the water. Typically, larger sediments (i.e. sand) will settle more readily than finer sediments (i.e. silts and clays). As such, the finest-grained sediments will likely persist longer in the water column, although any suspended sediment is expected to settle relatively quickly.

v. Ecological and natural resources impacts

Wetlands: The proposed transmission cable route will cross wetlands from Southern Aroostook to Searsport. Temporary effects to wetlands will occur within the corridor during construction. MPX will re-establish the original surface hydrology in disturbed wetland areas by backfilling the trench with native wetland soil to the extent practicable, and a layer of native topsoil will be installed. These areas will be graded to pre-existing conditions and will be seeded to allow areas to naturally revegetate. The Project as proposed would be located within an existing ROW (SL-ROW) where vegetative management activities are currently taking place and these activities will continue for the life of the Project to avoid the establishment of deep-rooted plants. Emergent wetland vegetation is expected to establish within a year or two after construction.

Terrestrial Wildlife: It is expected that most effects to terrestrial wildlife habitats within or adjacent to the cable corridor will be temporary, such as effects from construction activities which include noise, vegetation clearing, and lighting. Mobile wildlife species are expected to move into similar adjacent habitats during construction and return to the area once construction is completed. Upon completion of construction activities, MPX will conduct initial restoration, including soil stabilization and temporary seeding of the construction areas. Once erosion control vegetation cover has been established, the construction corridor will be allowed to re-vegetate naturally. As described above, only limited vegetation management will be conducted for repairs or other maintenance of the cables.

Terrestrial Vegetation: Vegetation clearing and excavation activities during construction will result in temporary effects to vegetative communities along the cable route, which is a maintained ROW. Following construction activities, disturbed areas will be seeded and graded, which will assist in stabilizing soils and rapidly establishing vegetation. Therefore, herbaceous vegetation and successional shrubs are expected to recover quickly following restoration and stabilization efforts. A limited number of smaller trees may need to be cleared during construction activities and these would take longer to reestablish. To avoid and/or minimize effects to forested communities, MPX will avoid cutting mature trees where practicable. Permanent changes to vegetation cover are only anticipated where converter stations will be constructed. Any existing habitat located within the footprint of each structure would be lost.

Submerged Aquatic Vegetation: Impacts to Submerged Aquatic Vegetation (SAV) beds are expected to be minimal. A substantial portion of the construction activities will occur in relatively deep waters where SAV does not exist. If SAV is located within the construction corridor, re-suspended sediment and turbidity from construction activities could temporarily affect aquatic vegetation through reduced photosynthesis by covering the leaf surface with fine silts or clay or reducing light penetration through the water column. The increase in turbidity and re-suspended sediments will be short-term and localized.

Benthic Community: The potential effects to the benthic community will depend on factors such as substrate type, water depths, and hydrodynamics. In areas where the cable cannot be buried, concrete mats will be used to cover and protect the cables. The mats will bury the existing substrate as well as any slow moving or immobile benthic life and will also create a

new substrate for colonization of epibenthic organisms. +Recovery of the benthic habitat is expected to occur relatively quickly, by natural hydrodynamic and sedimentation processes. Each cable will be approximately five inches in diameter and will be buried well below the sediment surface, so as to not interfere with this habitat being restored.

Fish: Underwater cable installation may result in temporary and localized increases in suspended sediments. Turbidity may temporarily affect predation efficiency of sight feeding fish in the vicinity of the cable route during installation. However, fish are likely to leave the immediate construction area once construction activities begin in order to avoid the construction activities and will resume normal activities in nearby habitat. Any suspended sediments from construction activities are expected to settle quickly out of the water column or disperse. Thus, any potential effects to fish species in or adjacent to the cable route are expected to be minimal.

Threatened and Endangered Species: The federal Endangered Species Act (ESA) is administered by the U.S. Fish and Wildlife Service and the National Marine Fisheries Service. At the state level, the Maine Department of Inland Fisheries and Wildlife (MDIFW) is responsible for managing inland fish and wildlife listed under Maine's Endangered Species Act while the Maine Department of Marine Resources addressed marine species. The Massachusetts Endangered Species Act is administered by the Massachusetts Division of Fisheries and Wildlife. Environmental effects related to threatened and endangered species would be similar to those discussed above, based on species and location (e.g., marine or terrestrial). Fish species may be temporarily displaced by cable installation operations, either directly by cable installation equipment or indirectly by exposure to short-term changes in suspended sediments, turbidity and loss of forage base. Fish displacement along the proposed route will be limited to the period of active construction activities. Fish in the vicinity of these activities may avoid the installation equipment and areas temporarily affected by increased turbidity. Potential effects would be limited to primarily demersal (bottom-oriented) species or life-stages. These effects are expected to be short term, and would potentially affect species that rely on benthic habitats for food, cover, or spawning habitat. Project installation is expected to only have minimal effects to Pelagic species and life-stages. These species and life stages would be expected to continue using the water column during cable installation though they may avoid the small portion of the water column occupied by cables and cable installation equipment during the installation process.

For marine mammals, freshwater amphibians, and aquatic reptiles, the cable installation process should represent a short-term disturbance that these species would avoid by moving away from the construction activities. Noise and the slight changes in water quality associated with sediment disturbance and turbidity during installation should not pose a significant effect on any of these species.

Most of the effects to terrestrial habitat associated with cable installation are expected to be temporary. Disturbance would occur during trenching for cable placement, but all trenched materials will be maintained on site, returned to its original location, and the area restored to

the original condition following completion of construction. It is anticipated that mobile species are capable of avoiding the area during construction and will use similar habitats located nearby. The primary effect would be the potential for direct mortality of plants and species having low mobility within the actual disturbance footprint.

MPX will seek to avoid highly sensitive areas to the maximum extent practicable. MPX will implement agency recommended BMPs, strategically time construction activities to avoid impact to rare species, minimize clearing of vegetation, use erosion and sediment control measures and devices, expedite construction to the degree possible to minimize duration of construction effects, and use protective mats and temporary crossings in sensitive areas.

vi. Land use impacts

The marine portion of the cable route will have minimal potential effect on public or private property, open space, or any existing or planned land uses. Any disruption to the recreational use of the proposed construction corridor is expected to be temporary. Effects on land use are expected to be avoided and/or minimized by routing along an existing and maintained ROW to the extent possible (the entire terrestrial route is within the existing SL-ROW).

During construction, it is anticipated that there will be temporary effects on existing and planned land uses. Construction in public areas will need to provide measures for safe travel by motorist, bicycles, and pedestrians, which may result in a temporary disruption to normal traffic patterns. There will also be increased ambient noise. However, these effects will be of a relatively short duration and are only associated with construction phase.

vii. Cultural resources

While waterways have served as important transportation routes and economic conduits, most archaeological sites and historic standing structures are located along shorelines or in terrestrial areas. However, shipwrecks or Pre-Columbian artifacts can be located in marine environments. There is a potential that construction of the terrestrial portion of the cable may affect the integrity and character-defining features of archaeological sites, historic properties, and shipwrecks potentially located within the immediate vicinity of the Project. Underground sections of the route may intersect with undocumented archaeological sites, which could be damaged or destroyed by construction activities. The transmission cables may also be located in the vicinity of historic buildings and structures.

No significant disruptions or effects to identified heritage resources are anticipated to occur due to construction or operation of the transmission cables, as the burial of the cables will not add significant visual elements to these historic structures. The converter stations will be aboveground, but are not expected to have a substantial adverse effect on any historic properties in the vicinity.

viii. Previous site use (e.g., greenfield, brownfield, industrial, etc.)

The northern converter station site will no longer be utilized for agriculture / forestry. The currently proposed location for the southern converter station is not in use. Otherwise, there will be no changes in current land use.

ix. Noise level impacts

It is anticipated that large equipment may cause temporary noise impacts during construction. During the underground portion of the cable installation, various large equipment vehicles required for initial vegetation clearing (if necessary) and trenching operations will be on-site. The trench excavation will be performed using traditional excavation equipment. In some areas such as stream or road crossings, HDD equipment will be present at those locations for up to several days at a time. A listing of typical ranges of equipment sound levels from the construction equipment associated with each construction phase at a standard distance of 15 meters (50 feet) and a distance of 122 meters (400 feet) is provided in table 5-1 below.

Table 5-1 - Construction Phase Noise Levels of the Transmission Line

Construction Phase	Construction Equipment Noise Levels (dBA)	
	15 m / 50 Feet	122 m / 400 Feet
Site Clearing and Preparation	60 to 90	42 to 72
Trenching	60 to 90	42 to 72
Cable Laying	50 to 90	32 to 72
Backfilling	73 to 84	35 to 66
Cable Pulling/Splicing	50 to 80	32 to 62

Source: Ebasco Environmental (1987)

During operation, the Project will be required to be in compliance with applicable noise standards. There is no noise expected to be associated with the transmission cables.

x. Aesthetic/visual impacts

There will be temporary visual effects during construction of the Project. During the overland portion of the cable installation, large equipment required for initial vegetation clearing (if necessary) and trenching operations will be on-site. Vegetation clearing will be conducted in the construction zone to allow for safe operations. In some areas such as stream or road crossings, HDD equipment will be present at those locations for up to several days at a time. It is anticipated that cable installation activities will occur twenty four hours per day/seven days per week in most areas, with nighttime shutdowns occurring in select sensitive receptor areas, so that nighttime lighting will be required. Because of the variety of subsurface material that could be encountered, it is difficult to anticipate how long a work crew might remain in a particular area, as the installation procedure is also a staggered event.

The cleared width within the right-of-way and temporary construction workspace will be kept to the minimum that will allow for spoil storage, staging, assembly of materials, and all other

activities required to safely install the Project. Effects to trees that provide a buffer to visually sensitive areas will be avoided and/or minimized. The final stage of construction will consist of restoring the transmission cable right-of-way and work areas to their original condition and character as much as possible, compatible with the operation and maintenance of the Project.

During marine cable installation there will be increased vessel activity along the transmission cable route. Transmission cables will be laid by specialized cable-laying vessels, with additional vessels present for on-water refueling of vessel engines, excavators, diesel generators, diesel water pumps, etc. Because of the size and need to stay on-station for long periods of time, the major cable-laying and/or cable burial vessels will not make daily or frequent movements to ports. Instead, these vessels will be supported by a variety of smaller vessels that will support crew shift changes, bring supplies, re-fuel, and monitor the work. Visual effects for actual installation in a given area could last from a few hours to a day or more, while daily support vessel operations may be present and intermittent along the same watercourse over a longer period.

The only permanent above-ground facilities associated with the Project will be the converter stations at the Haynesville and Conley Terminal locations and any near-shore indicators of the submarine transmission cable (e.g. line markers, warning signs at navigable waterways). Line markers will not be obtrusive within existing corridors. Warning signs at the banks of navigable waterway will be located where visual contrasts are minimized by existing shoreline development and where visual sensitivity is low.

xi. Transmission infrastructure impacts

The MPX Project will need to comply with the requirements set out by the ISO-NE and it is therefore anticipated that there will be no impacts to existing transmission infrastructure other than those identified in the ISO-NE System Impact Study.

xii. Fuel supply access, where applicable

Not applicable.

7.4 Provide documentation identifying the level of public support for the project including letters from public officials, newspaper articles, etc. Include information on specific localized support and/or opposition to the project of which the bidder is aware. Provide copies of any agreements with communities and other constituencies impacted by the project, and a plan for community outreach activities, and discuss the status of that plan.

County Line Project - In general, community outreach and support is an integral element of NRG's development strategy and operational plans. As long-term owner-operators of the projects we develop, we understand the value of positive community relations and support. In addition, we are proud that our projects often become a symbol of local renewable energy leadership, and strive to help communities promote the projects for educational purposes and as examples of environmental stewardship.

NRG Corporate Citizenship

In addition to Community Benefits Agreements, NRG's traditional approach to community support for all operating projects includes:

- Dedication to communities: In 2015 NRG donated \$6.8 million to over 250 organizations, including educational, and our employees volunteered over 20,000 hours. As further evidence of our commitment to our communities, NRG recently received honors for the Company's activism from the Civic 50 for the second year in a row.
- Educational sponsorships & special programs: NRG has worked extensively with educational and academic facilities to provide research support, scholarships and sponsorships. Among our academic initiatives, NRG sponsored the MIT Enterprise Forum and the "Advances in Energy Storage, Batteries and Metal Extraction," with MIT Professor Donald Sadoway.
- Commitment to a sustainable energy future: NRG's goal is to reduce carbon emissions 50% by 2030 and 90% by 2050 (using 2014 as a baseline). NRG was named one of the Top 100 Companies in the NASDAQ OMX CRF Global Sustainability Index. More information about our sustainability goals can be found in our 2016 Sustainability Report.

<http://www.nrg.com/sustainability/reporting/sustainability-snapshot/>

Other Community Benefits

The Project provides a new source of long-term income and direct economic benefit to the local landowners participating in the Project through land leases, fee acquisitions, and easements. Additional income from the Project to the landowners will also be a stable source of "multiplier" spending in the region. The Project allows landowners to capture economic benefits without disruption to existing land uses and income from the project will supplement, not displace, what landowners typically earn from logging and other traditional uses of their property. Amid uncertain economic and market conditions, County Line Wind will provide a stable, diversified income stream for landowners.

In addition Maine law requires that wind energy projects offer a minimum of \$4,000 per turbine per year in community benefits to Maine communities hosting wind projects. NRG projects have typically executed Community Benefits Agreements that greatly exceed the statutory requirement and have included annual payments to host communities to be used at the Town's discretion for public purposes such as lowering tax rates or investment in municipal assets or services; land conservation; outdoor education and recreation; and lowering electric rates or energy costs.

The Maine Renewable Energy Association has provided a letter of support for this project, provided as **CONFIDENTIAL CL Attachment 7.2.i**.

MPX Project – MPX has consulted with key federal and state agencies during the development of the Project and has encountered no fatal flaws. Minutes of meetings previously held with the agencies are provided in **CONFIDENTIAL MPX Attachment 7.1 (POD Appendix A&B)**. MPX has also been in close communication with key stakeholders including Bangor International Airport. To date none of these organizations have indicated any opposition or even concern with the MPX Project as proposed.

MPX is working with TRC and preparing Stakeholder Consultations with:

- Maine Lobstermen's Association
- Downeast Lobstermen's Association
- Maine Coast Fisherman's Association
- Friends of Penobscot Bay
- Massachusetts Lobstermen's Association
- Conservation Law Foundation
- U.S Coast Guard
- Local Municipalities and More

The extensive studies and permitting process will include several public information sessions. MPX is keenly aware of the sensitive nature of the Penobscot Bay ecology, current Mercury Level concerns and planned dredging projects in Searsport and Boston Harbors. The several months between bid submission and selection will include extensive stakeholder outreach and collaboration.

7.5 For bids that include New Class I Renewable Portfolio Standard Eligible Resources, provide documentation demonstrating that the project was or will be qualified as such. If the facility is already in operation, please indicate when the facility received such qualification.

County Line Project - County Line will be eligible for Tier 1 Class I renewable energy source qualification under current Massachusetts, Connecticut, and Rhode Island law as a new-build wind power facility.

MPX Project – N/A

7.6 All bidders must include sufficient information and documentation that demonstrates that the bidder will utilize an appropriate tracking system to ensure a unit-specific accounting of the delivery of Clean Energy Generation, to enable the Department of Environmental Protection, in consultation with DOER, to accurately measure progress in achieving the commonwealth's goals under chapter 298 of the acts of 2008 or Chapter 21N of the General Laws. The RECs and environmental attributes associated with Clean Energy Generation must be delivered into the Distribution Companies' NEPOOL GIS accounts.

County Line Project – NRG is an active participant in the NEPOOL energy market, through both its thermal and renewable fleet, and an active participant in the REC market through its solar business in Massachusetts. All of the infrastructure and expertise to navigate these processes exists today at NRG. The project will be metered using approved equipment, and RECs will be transferred to the contracting Distribution Company's GIS account as required.

MPX Project – MPX will utilize an appropriate tracking system. The specific system to be utilized is TBD.

7.7 Identify any existing, preliminary or pending claims or litigation, or matters before any federal agency or any state legislature or regulatory agency that might affect the feasibility of the project or the ability to obtain or retain the required permits for the project.

County Line Project - To our knowledge, there are no existing, preliminary, or pending claims or litigation, or matters before any federal agency, state legislature or regulatory agency that might affect the feasibility of the County Line Project or the ability obtain or retain the required permits.

MPX Project - To our knowledge, there are no existing, preliminary, or pending claims or litigation, or matters before any federal agency, state legislature or regulatory agency that might affect the feasibility of the MPX Project or the ability obtain or retain the required permits.

8. Engineering and Technology; Commercial Access to Equipment

8.1 Provide a reasonable but preliminary engineering plan which includes the following information:

- i. Type of generation and transmission technology, if applicable
- ii. Major equipment to be used
- iii. Manufacturer of the equipment
- iv. Status of acquisition of the equipment
- v. Whether the bidder has a contract for the equipment. If not, describe the bidder's plan for securing equipment and the status of any pertinent commercial arrangements
- vi. Equipment vendors selected/considered
- vii. History of equipment operations
- viii. If the equipment manufacturer has not yet been selected, identify in the equipment procurement strategy the factors under consideration for selecting the preferred equipment

County Line Project - Preliminary Engineering Plan Summary

Item	Status
i. Type of Generation Technology	Vestas v150, 4.2 MW wind turbine in combination with underground and undersea direct current 345kV transmission
ii. Major Equipment to be Used	Wind turbines; Balance of Plant electrical equipment including: turbine transformers, main transformer ("MPT"), transmission lines and substation
iii. Manufacturer of the Equipment	Turbines and transformers: Vestas
iv. Status of Acquisition of the Equipment	In discussions with Vestas regarding supplying wind turbines for the Project, letter of intent and turbine specific information is provided in CONFIDENTIAL CL Attachment 5.2.i.
v. Contract for the Equipment	None of the equipment for County LineWind is currently under contract. Financing turbine and major equipment will be subject to the successful execution of a PPA, as well as final engineering and project design. All major equipment will be procured upon successful negotiation of project-specific terms and conditions. Suppliers' ability to

8. Engineering and Technology; Commercial Access to Equipment

	meet critical path schedule, technical requirements to optimize project performance and price parameters will ultimately determine final selections. Contract will be executed pending successful term sheet negotiations and establishment of a final delivery date.
vi. Equipment Vendor	letter of intent and turbine specific information is provided in CONFIDENTIAL CL Attachment 5.2.i.
vii. History of Equipment Operations	See equipment vendor under "Manufacturer of the Equipment."
viii. Equipment Procurement Strategy	The v136 is the evolution of the popular and proven v112 turbine model, adding a larger rotor diameter to increase production.

MPX Project - Preliminary Engineering Plan Summary

Item	Status
i. Type of Transmission Technology	<p>The transmission technology is High Voltage Direct Current (HVDC) converter-based high voltage direct current transmission.</p> <p>Voltage Source converter (VSC) technology for HVDC transmission was developed and launched by ABB as HVDC Light in 1997. VSC-based HVDC stations are much compact than older Line Commutated Converter (LCC) based HVDC converter stations of the same capacity, rating, and technical characteristics. This advantage allows VSC based technology to provide reactive power and voltage support services similar to those traditionally provided by generators located near major load centers. Such features are especially important when fossil fueled based local generation is phased out and replaced with renewable resources located far away from major load centers. Moreover, utilizing VSC-based HVDC technology and the polymer insulated DC cables, enables the construction of long-distance underground and submarine cable based transmission systems that are not technically feasible with traditional AC transmission technologies due to charging currents that occur in long-distance AC cables.</p> <p>As transmission capacity has increased and electrical losses declined, HVDC VSC technology has become the natural choice for future transmission projects. VSC technology is a prerequisite to solving many of the energy system challenges of the future. It has all the right characteristics to:</p> <ul style="list-style-type: none"> ■ Further integration of remote renewables such as hydro, wind and solar generation into the energy system ■ Stabilizing transmission grids with large shares of intermittent

8. Engineering and Technology; Commercial Access to Equipment

	<p>generation</p> <ul style="list-style-type: none"> Facilitating energy sharing and trading by interconnecting energy markets Supplying electricity into densely populated urban centers
ii. Major Equipment to be Used	The major equipment to be used includes two HVDC Converter stations, HVDC cable to be selected as appropriate and a conventional AC Substation.
iii. Manufacturer of the Equipment	<p>ABB is the equipment manufacturer for the Converter Station technology.</p> <p>For cable, the MPX Project is under negotiations with three reputable cable manufactures:</p> <ul style="list-style-type: none"> [REDACTED] [REDACTED] [REDACTED] <p>The cable companies experience is enclosed in CONFIDENTIAL MPX Attachment 8.1</p>
iv. Status of Acquisition of the Equipment	The MPX project is has an ongoing agreement with ABB and is currently in negotiations with cable vendors.
v. Contract for the Equipment	The MPX Project has an agreement with ABB for the converter station equipment and is negotiations with the cable vendors. The MPX Project will execute fix-priced contracts with all equipment vendors simultaneous to the RFP contracts.
vi. Equipment Vendor	The equipment vendor will be ABB. MPX is considering three vendors [REDACTED] for HVDC cable; one cable provider will ultimately be selected.
vii. History of Equipment Operations	Examples of cables and operating VSC-based HVDC projects, as well as projects that are currently under construction around the world, are provided in CONFIDENTIALMPX Attachment 8.1 . The projects in the ABB reference list represent a total transmission capacity of close to 10,000 MW.
viii. Equipment Procurement Strategy	ABB has been selected as the equipment manufacturer. For cable, ongoing negotiations with the vendors will continue and selection will be completed simultaneous to RFP contract execution.

8.2 If the bidder has not yet selected the major equipment for a project, please provide a list of the key equipment suppliers under consideration.

County Line Project - Along with the currently contemplated wind turbine supplier, NRG has established good working relationships with engineers, suppliers, and reputable contractors for electrical equipment (i.e. substation, interconnection, transmission and balance of plant contractors. Turbine transportation and commissioning are typically outsourced to wind turbine suppliers and the remaining construction is contracted through Engineering, Procurement, and Construction ("EPC") contractors who provide all of the necessary management, supervision, labor, materials, tools, engineering, mobilization, testing, and demobilization required to complete construction of the Project.

Included in **Attachment 5.2.i** is an EPC proposal from Reed & Reed.

MPX Project – MPX is working with ABB for the Converter Stations. For HVDC underground and submarine cable, MPX is considering [REDACTED]. Only one company for cables will be selected.

8.3 Please identify the same or similar equipment by the same manufacturer that are presently in commercial operation including the number installed, installed capacity and estimated generation for the past three years.

County Line Project - The Vestas 4 MW platform proposed for County Line is designed for a broad range of wind and site conditions enabling delivering industry-leading reliability, serviceability and exceptional energy capture.

The 4 MW platform was introduced in 2010 with the launch of the V112-3.0 MW[®]. Since then over 13 GW of the 4 MW Platform has been installed all over the world making it one of the most popular and reliable platforms in the Vestas fleet. Vestas claims that this platform is "the most tested turbine ever." The turbine incorporates thoroughly examined and proven technologies including pitch, yaw and control systems, and drive-train concepts. The turbine also incorporates a number of innovations, including a cooling-system to maximize electricity generation and a power system featuring a full-scale converter. The power system achieves high energy efficiency, offers better grid support and reduces drive-train loads. Rotor diameters range from 105 to 150 meters and the rated output power is up to 4.2 MW. Using well proven technologies like a full-scale converter, the 4 MW platform meets even the most challenging grid requirements providing excellent energy yield in all wind and weather conditions.

Large Diameter Steel Towers (LDST) are also available to optimize annual energy production on low wind sites.

Technical specifications and a proposal for supply of the Vestas v150 has been provided in **CONFIDENTIAL CL Attachment 5.2.i**.

8. Engineering and Technology; Commercial Access to Equipment

NRG has extensive commercial and technical expertise with Vestas wind turbine technology. NRG currently operates over 300 Vestas turbines totaling more than 900 MW.

MPX Project - ABB has supplied and commissioned numerous high capacity HVDC VSC projects around the world, including the Dolwin 1, NordBalt and Dolwin 2 projects in Europe, which all have similar voltage and capacity ratings as the proposed MPX project. A comprehensive list of all HVDC VSC projects that were either completed or are currently under construction by ABB around the world is provided in the attached reference list, **CONFIDENTIAL MPX Attachment 8.1**. Also, ABB has supplied a large number of so called line-commutated converter (LCC) stations around the world and a similar reference list of all HVDC LCC projects is included in **CONFIDENTIAL MPX Attachment 8.1**, including the Sandy Pond HVDC station outside Boston and the Highgate HVDC station in northern Vermont.

8.4 For less mature technologies, provide evidence (including identifying specific applications) that the technology to be employed for energy production is ready for transfer to the design and construction phases. Also, address how the status of the technology is being considered in the financial plan for the project.

County Line Project - The technology, make, and model are commercially mature, see Section 8.3.

MPX Project – While item 8.4 refers to “technology to be employed for energy production” specifically, MPX notes that the MPX Project selected and/or identified technology is commercially mature. See **CONFIDENTIAL MPX Attachment 8.1**.

8.5 Please indicate if the bidder has a full and complete list of equipment needed for all physical aspects of the bid, including generation facilities, transmission lead lines, transmission proposals, and mandatory and voluntary transmission system upgrades. If not, identify the areas of uncertainty and when the full and complete list of equipment will be identified.

County Line Project - Please see “Contract for the equipment” in the Preliminary Engineer Plan Summary table.

A proposal from Vestas is provided as **CONFIDENTIAL CL Attachment 5.2.i**.

MPX Project – MPX has a full and complete list of equipment needed for all physical aspects of the transmission proposal regarding the DC Converters. See **CONFIDENTIAL MPX Attachment 8.5**. Cables are pending and system upgrades at K Street have been determined via the ISO-NE System Impact Study process.

8.6 Please indicate if the bidder has secured its equipment for all physical aspects of the bid, including generation facilities, transmission lead lines, transmission proposals,

and mandatory and voluntary transmission system upgrades. If not, identify the long-lead equipment and describe the timing for securing this equipment.

County Line Project - See response in Section 8.1.

MPX Project - MPX has not yet secured its equipment for all physical aspects of the bid. Long-lead equipment includes:

- DC Converter Stations – To be commissioned upon MPX Project selection in this RFP.
- Transmission Cable – To be commissioned upon MPX Project selection in this RFP.

See response in Section 8.1 and Section 10 for additional details regarding the MPX Project schedule.

9. Operation and Maintenance

9.1 Provide an O&M plan for the project that demonstrates the long term operational viability of the proposed project.

County Line Project - NRG maintains a high level of availability with a platform that includes end-to-end oversight of development, engineering and construction, and a proactive approach to operations and maintenance. NRG's in-house operations capabilities include real-time wind resource monitoring and analysis, on-site O&M personnel, and regional Commercial Asset Management staff.

Once COD has been achieved, NRG's O&M team will be prepared to manage all operational and commercial matters related to the site. NRG will provide the following resources at or for the County Line Wind facility to ensure safety and complete readiness by COD:

- Permanent staff recruiting;
- Staff training and safety;
- Policy and procedure guidance and manuals;
- Operations and engineering readiness;
- Maintenance services readiness; and
- Install Supervisory Control and Data Acquisition ("SCADA") and asset management systems.

For more information on NRG's Renewable Operations and Maintenance (RENOM) platform, please reference **CONFIDENTIAL CL Attachment 9.1**.

Staffing

The Project site is expected to be initially staffed by an NRG team and also a warranty and maintenance services team staffed by the turbine manufacturer. NRG expects to contract with the turbine manufacturer to take primary responsibility for the maintenance of the wind turbines for up to ten years. We currently plan that the turbine manufacturer will also provide maintenance services for County Line Wind. The turbine manufacturer will operate and maintain the wind turbine generators in accordance with an operating agreement that runs concurrently with the turbine warranty. The agreement will include a guarantee of a turbine's availability to generate electricity a specified percentage of the time. With this type of relationship, NRG and the turbine manufacturer work together to attain common objectives, sharing risks and rewards, and working in partnership in order to benefit from the same common objectives of obtaining the highest level of equipment availability.

While the turbine manufacturer is on-site operating and maintaining the turbines, the NRG O&M team will oversee the Project and has the responsibility for maintaining the balance of plant, which includes all elements of the facility from the low side of the turbine transformer to interconnection with the grid. This also includes maintenance of roads, vegetation

management, and safety coordination. In addition, the County Line Wind site manager is responsible for overall management and operation of the wind farm, including the following:

- Management of turbine manufacturer staff, site contractors, and third party vendors;
- Preventive and corrective maintenance on all equipment to maximize turbine availability;
- Compliance with applicable requirements of FERC, NERC/NPCC, ISO-NE, and state regulators;
- Relationships with the land owners and current land users;
- Environmental compliance and permit obligations;
- Insurance and warranty policies; and
- Business intelligence software/analysis to maximize turbine performance.

NRG's maintenance plans incorporate manufacturer's recommendations and include both scheduled and unscheduled maintenance options. Major maintenance activities are generally scheduled per the turbine manufacturer equipment manuals. To minimize downtime, maintenance activities are coordinated with both the turbine manufacturer and local utility. NRG has extensive experience with a diverse range of wind turbine vendors and stipulates the highest quality maintenance services and safety standards performed by their trained technicians.

County Line Wind is expected to require a total of 17-18 full-time operations staff. We assume that the turbine manufacturer will generally provide employee-to-turbine staffing for turbine maintenance of roughly 1:10, meaning 15 wind technicians, plus an additional 2-3 full-time NRG employees. The NRG positions include site supervisor, manager, and administrative roles.

In addition to our on-site staff, NRG provides remote monitoring and trouble shooting from a state-of-the-art operations center with trained and experienced NERC-certified operators. From the operations center, NRG evaluates project performance via the SCADA system and has the ability to provide remote resets, technician dispatch notification, off-hours curtailment response, reporting, and warranty notice documentation. The turbine manufacturer may also employ tools such as condition based monitoring, which utilizes software and sensors to provide early detection and correction of potential failures in major components. NRG currently operates roughly 4.5 GW of wind and solar from its remote operations center.

Inspections and Reporting

NRG prepares an annual operating plan that in turn uses various equipment manuals as guidelines for minor and major maintenance activities. These plans are closely coordinated with the turbine manufacturers or other outside contractors as necessary. The annual operating plan also addresses compliance with environmental and other specialized maintenance requirements, such as transmission line right-of-way vegetation maintenance.

As part of the maintenance plan, NRG monitors operational equipment through visual inspections, equipment specification performance testing, and equipment performance data mining. NRG utilizes several subject matter experts for monitoring and testing specific equipment such as wind resource specialists, electrical engineers, and safety compliance specialists; however, a large portion of the monitoring is done by on-site staff and NRG's operations center. Equipment testing and performance analysis includes, but is not limited to the following tasks:

- Power Curve testing of turbine generators;
- Visual inspections of the turbine blades;
- Visual inspections of the site substation(s) and transformer(s);
- Visual inspections of relays, control wire, breakers, communication equipment, batteries, HMI devices, computer and communication security, and SCADA systems;
- Visual inspections of turbine foundations;
- Visual inspections of critical equipment sensors, such as vibration, heat, voltage, and fault indicators;
- Performing oil sampling of critical transformers to test equipment status; and
- Establishing baseline thresholds to monitor test results.

Careful documentation of testing results allows NRG to adjust scheduled maintenance protocol and optimize performance of the site.

MPX Project – Modern HVDC stations can be operated from a remote dispatch or control center. MPX staff will oversee all operations and maintenance for the transmission project. ABB and the selected cable provider will provide long-term maintenance support for their respective components of the project.

MPX will negotiate with ABB to provide the following services: ABB will supply technical support the manpower and material to perform the required checks. An ABB Specialist will be on site to provide technical support for the maintenance. The ABB Specialist will focus on the protection and controls system. The authorized Maintenance Personnel of MPX will perform remainder of the yearly maintenance. A preventative maintenance plan is provided by ABB which describes the required maintenance work. The ABB Specialist will be available for questions and ad-hoc hands on training. ABB also offers 24/7 phone support and preventive maintenance services for HVDC facilities.

ABB Specialist will have in-depth knowledge in one or more of the following areas: control system; HMI (OWS); SCADA (GWS); main control (MACH); SCM server; IO panels; cooling system; IGBTs; protection systems; system design; etc. ABB will have a specialist on site, assisting the authorized maintenance Personnel in executing the preventive maintenance of the equipment; provide health check on the protection and control system performed according to the proposed service plan; audit spare parts stock; provide hands-on-training to individuals; etc. See also **CONFIDENTIAL MPX Attachment 9.1**.

9.2 Describe in detail the proposed O&M funding mechanism and funding levels to support planned and unplanned O&M requirements.

County Line Project - O&M activities will be funded from operating revenues, consistent with NRG's approach and track record at other operational projects. NRG may choose to fund a reserve against large scale equipment failures once the warranty period has expired. Such a reserve may be funded over time out of operating revenues and may be set up to match the deductible levels on our insurance coverage. Actual funding levels for the Project have not been finalized.

MPX Project - The O&M and major maintenance expenses are included in the transmission service agreement and project pro-forma and will be very well covered by the project's operation income. Among the many positive characteristics of buried HVDC lines are low O&M and maintenance expense. As described in section 9.1, CET is considering options proposed by ABB regarding O&M. Depending on the selection of an option and negotiation of responsibilities, the cost of Preventive Maintenance for one to five years can vary from [REDACTED] per station to [REDACTED] per station.

9.3 Describe the terms (or expected terms) of the warranties and/or guarantees on major equipment that the bidder is utilizing or proposing to utilize.

County Line Project - Based on recently executed turbine supply agreements, NRG expects that warranty and maintenance contracts up to ten years in duration are feasible. However, NRG will not have fully executed warranty provisions for the Project until the major equipment negotiations and purchases are complete. The following are indicative turbine manufacturer warranty terms:

- Up to ten year defects warranty
- Up to ten year Availability warranty (based on lost production, not lost time)
- Power curve warranty
- Sound power level warranty

MPX Project - The predicted service life for ABB HVDC voltage source converter stations is 40+ years on the basis that owner/operator adheres to ABB's recommended preventive maintenance measures. See **CONFIDENTIAL MPX Attachment 9.1**.

Also, due to the fast development cycle in the IT industry, it is becoming common industry practice to replace/upgrade control and protection system hardware in HVDC stations after approximately 20-30 years. For example, the two HVDC stations delivered by ABB in New England in the 1980s (i.e., the Highgate back-to-back station in Vermont and the Sandy Pond converter station in Massachusetts), were recently upgraded by ABB with new state-of-the-art computer systems. See **CONFIDENTIAL MPX Attachment 9.3** for additional information about HVDC stations around the world that have been upgraded by ABB.

HVDC station equipment warranties commence on the substantial completion date and typically continue for a period of thirty-six (36) months from the substantial completion date. However, the warranty period for any part or component of the work which is corrected, repaired or replaced is typically renewed for a period of twelve (12) months from the date of completion of such correction, repair or replacement. (In a limited number of projects, we have seen owner requirements for an equipment warranty period of up to 60 months.)

In addition to equipment warranties, HVDC station contracts typically do also include performance guarantees, including guarantees of real power delivery capacity, reactive power capacity, power losses, energy availability and failure rates for critical components. See **CONFIDENTIAL MPX Attachment 9.3** with typical performance guarantee terms for HVDC converter stations.

9.4 Describe the status of the project sponsor in securing any O&M agreements or contracts. Include a discussion of the sponsor's plan for securing a medium-term or long-term O&M contract, including the expected provider of O&M services.

County Line Project - The O&M services agreement with the turbine manufacturer will be negotiated as part of turbine procurement. In general, NRG will align the O&M services agreement with the turbine manufacturer for a term that, at a minimum, matches the turbine manufacturer's warranty. These services will be for turbine maintenance only. NRG will self-perform all other O&M services through its RENOM platform.

MPX Project - The Technology provider for the High Voltage Direct Current (HVDC) converter stations is ABB. ABB is an expert in the field of HVDC stations and has installed, operated and maintained them in the United States and worldwide. MPX has entered into an agreement with ABB in which they will provide this technology for the MPX Project. It will be installed by a qualified third party construction vendor with ABB oversight. After successful functional testing of the converter stations in Boston and Northern Maine the project will then be turned over to MPX. In addition, MPX is in discussions with ABB to provide an annual operation and maintenance service agreement. O&M requirements have been identified and are attached. The project plan is to have the contract in place for the ongoing O&M maintenance requirements. We are entering discussions with cable manufacturers and there is limited ongoing O&M for the cable. MPX will enter into an O&M contract with the cable manufacturer.

9.5 Provide examples of the bidder's experience with O&M services for other similar projects

County Line Project - NRG's Renewables group develops, constructs, finances, owns and operates solar and wind assets, both onsite and utility-scale. We currently own and operate a portfolio of nearly 4,500 MW of renewable energy assets including 35 wind farms, 16 utility-scale solar facilities, and a large number of distributed solar facilities. In-construction and development-stage projects exceed 850 MW across the C&I, community solar, and utility

renewables markets. Total MW installed include over 1,500 MW of solar and nearly 3,000 MW of wind. Below is a list of operating wind projects under NRG ownership:

Wind Projects

Project	State	Complete	% Ownership	Generation Owned (MW)	Total System Size (MW)
Alta	CA	Dec-10	100%	947	947
Bingham Lake	MN	Jun-06	99%	15	15
Broken Bow I	NE	Dec-12	16%	13	80
Buffalo Bear	OK	Nov-08	100%	19	19
Cedro Hill	TX	Nov-10	31%	47	150
Community Wind North	MN	May-11	99%	30	30
Crofton Bluffs	NE	Nov-12	20%	8	42
Crosswinds	IA	Jun-07	99%	21	21
Eastridge	MN	Apr-06	99%	10	10
Elbow Creek	TX	Dec-08	100%	122	122
Elkhorn Ridge	NE	Mar-09	67%	54	80
Forward	PA	Apr-08	100%	29	29
Goat Mountain I	TX	Apr-08	100%	80	80
Goat Mountain II	TX	Jun-09	100%	70	70
Hardin	IA	May-07	99%	15	15
High Lonesome	NM	Jul-09	100%	100	100
Jeffers	MN	Oct-08	100%	50	50
Langford	TX	Dec-09	100%	150	150
Laredo Ridge	NE	Feb-11	100%	80	80
Lookout	PA	Oct-08	100%	38	38
Mountain Wind I	WY	Jul-08	31%	19	61
Mountain Wind II	WY	Sep-08	31%	25	80
Odin	MN	May-08	100%	20	20
Pinnacle	WV	Dec-12	100%	55	55
San Juan Mesa	NM	Dec-05	75%	90	120
Sherbino	TX	Oct-08	50%	75	150
Sleeping Bear	OK	Oct-07	100%	95	95
South Trent	TX	Jan-09	100%	101	101
Spanish Fork	UT	Jul-08	100%	19	19
Spring Canyon II & III	CO	Oct-14	90%	54	60

Project	State	Complete	% Ownership	Generation Owned (MW)	Total System Size (MW)
Taloga	OK	Jul-11	100%	130	130
Westridge	MN	Jun-05	97%	17	17
Wildorado	TX	Apr-07	100%	161	161
		TOTAL		2,759	3,196

MPX Project – Con Edison has had a long standing relationship with ABB and various cable manufacturers and has relied on their services and expertise for many years. All experiences to date have been a positive relationship between all three parties. ABB provides technical oversight and ongoing support for their equipment which is installed in the Con Edison system. This includes but is not limited to high-voltage breakers, medium-voltage breakers, relay protection systems and transformers. The equipment and services provided are similar in nature to those required by the MPX Project.

Con Edison operates one of the world’s largest and most complicated energy delivery systems. The company was founded in 1823 as the New York Gas Light company and the electric, gas, and steam service now provides energy for the 10 million people who live in New York City and Westchester County. Con Edison’s electric distribution system covers approximately 600 square miles and contains a population of over nine million people. The system contains approximately 500 miles of high-voltage overhead transmission and approximately 700 miles of below-grade transmission at up to 345 kV. There are 38 high-voltage transmission substations and 62 area substations supplying network and non-network loads at 4kV to 33kV. There are 65 second-contingency networks and 19 first-contingency networks. The total distribution transformer capacity is 30 million kVA, of which 86% of the capacity is underground and 14% is overhead.

Every electrical and mechanical device on Con Edison’s system undergoes routine inspections and maintenance. Con Edison’s skilled operation groups proactively identify and resolve potential equipment and system issues before they become major events. This maintenance approach builds the bottom line of the company, resulting in a reliable electric system for our millions of customers. Con Edison was recognized by PA Consulting Group, Inc. in last year with the 2016 Outstanding System-Wide Reliability Award for the ninth year in a row. Con Edison also received the Reliability One Award for Outstanding Reliability Performance in the Northeast Region. These awards are possible because of the skillset and safety-conscious mindset of the dedicated Con Edison employees who operate and maintain the most complex energy distribution system in the country.

10. Project Schedule

10.1 Identify the elements on the critical path. The schedule should include, at a minimum, preliminary engineering, financing, acquisition of real property rights, Federal, state and/or local permits, licenses, environmental assessments and/or environmental impact statements (including anticipated permit submittal and approval dates), completion of interconnection studies and approvals, procurement, facility contracts, start of construction, construction schedule, fuel supply, and any other requirements that could influence the project schedule and the commercial operation date.

County Line Project – County Line Project

The critical path item for County Line Wind will be the timing of interconnection availability via Maine Power Express. As such, we have presented two schedules below for your consideration. First, the “Base Case” project schedule, which aligns development and construction activities with the completion date for the MPX line in [REDACTED]. Second, we have provided a schedule showing a reasonable and achievable development and construction timeline leading to a completion date but for transmission. This schedule has value for multiple reasons. First, understanding that MPX project is in an advanced stage development, we believe there are upside scenarios for advancing the completion date of that project. Second, there may be financial/strategic advantages to completing construction ahead of the completion of Maine Power Express. This would allow for claiming PTC eligibility based on excusable disruptions under the IRS’ continuity requirements.

Base Case Schedule

See attached Gantt Chart, prepared by Reed & Reed (**CL Attachment 5.2.i**). Critical milestones are summarized below:

Milestone	Timing
Permitting Studies	[REDACTED]
Permit Review	[REDACTED]
Civil Construction	[REDACTED]
Turbine Install (Season 1)	[REDACTED]
Turbine Install (Season 2)	[REDACTED]
Commissioning	[REDACTED]
COD	[REDACTED]

Accelerated Schedule

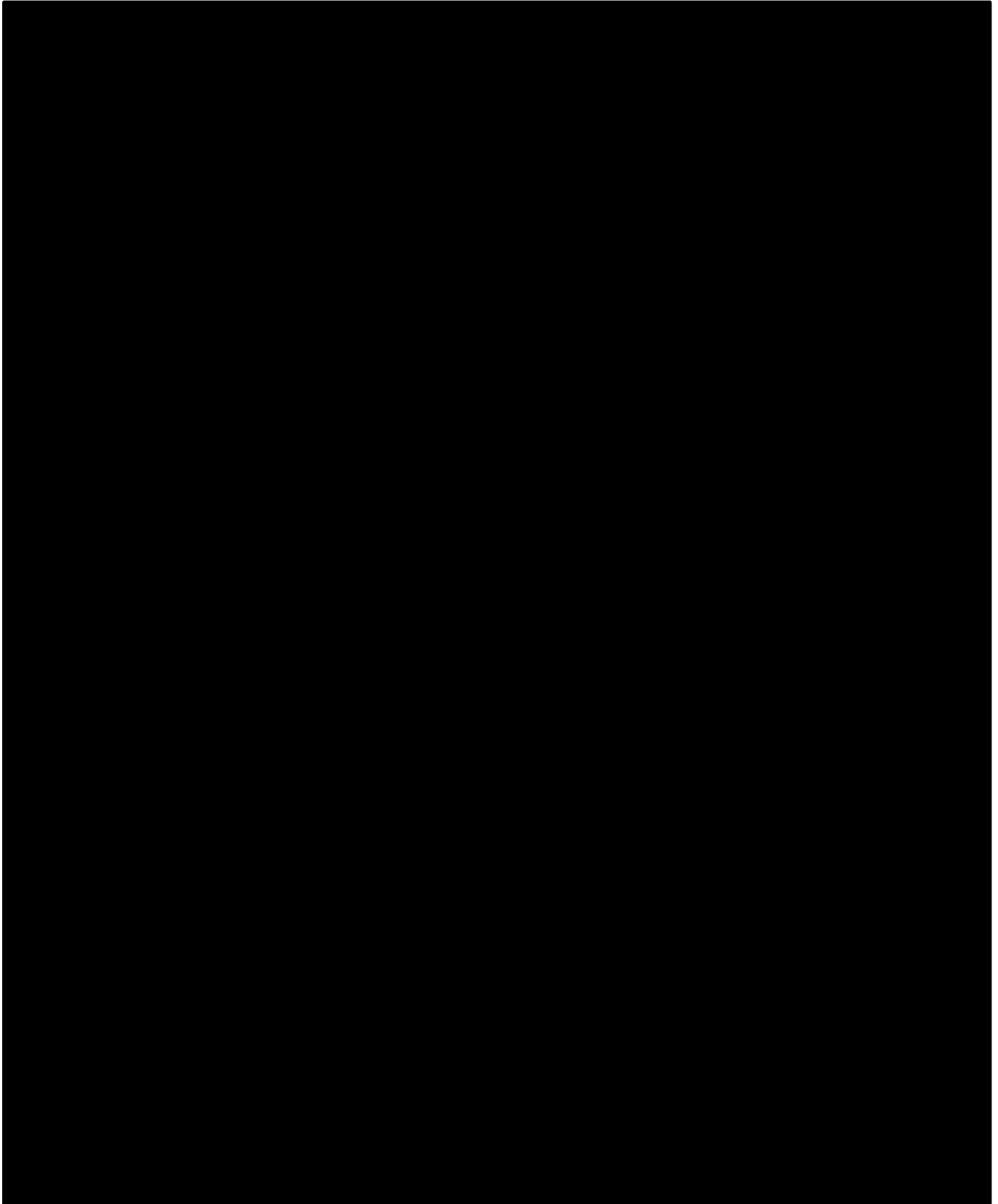
Using timelines provided by Reed & Reed and Stantec, we have prepared a supplemental schedule not limited by the pace of transmission development. That schedule is provided on the following page.

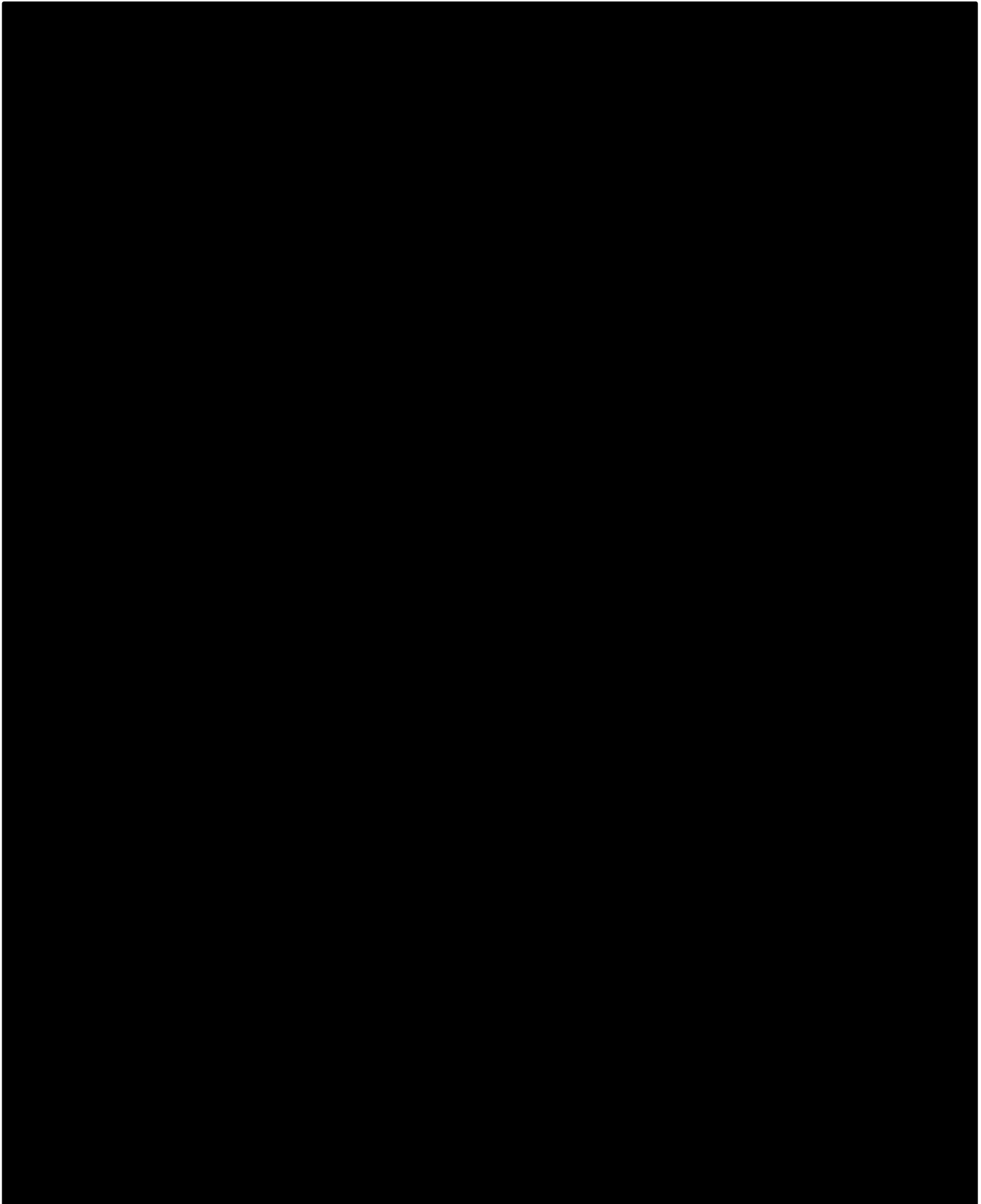
[REDACTED]

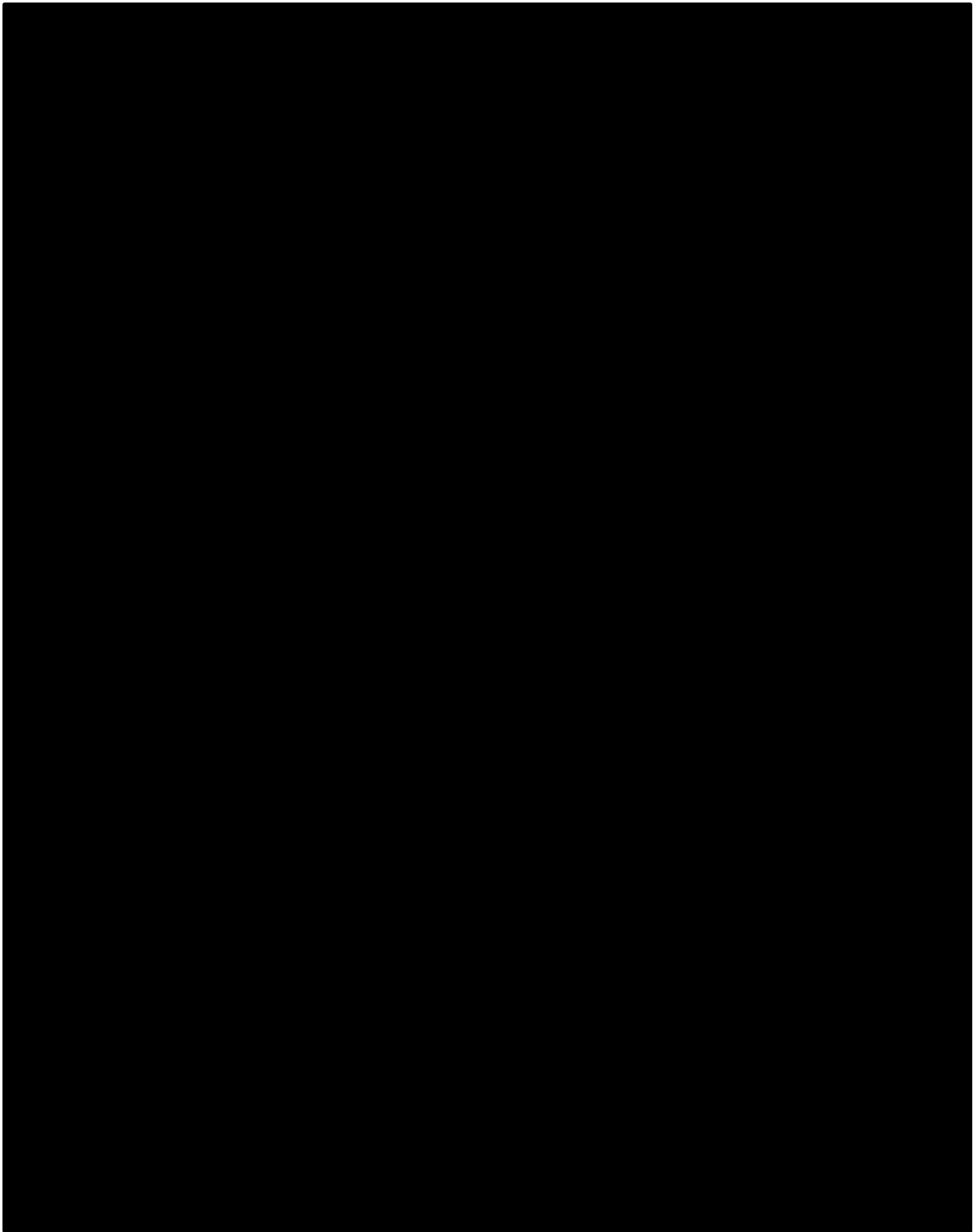
[REDACTED]

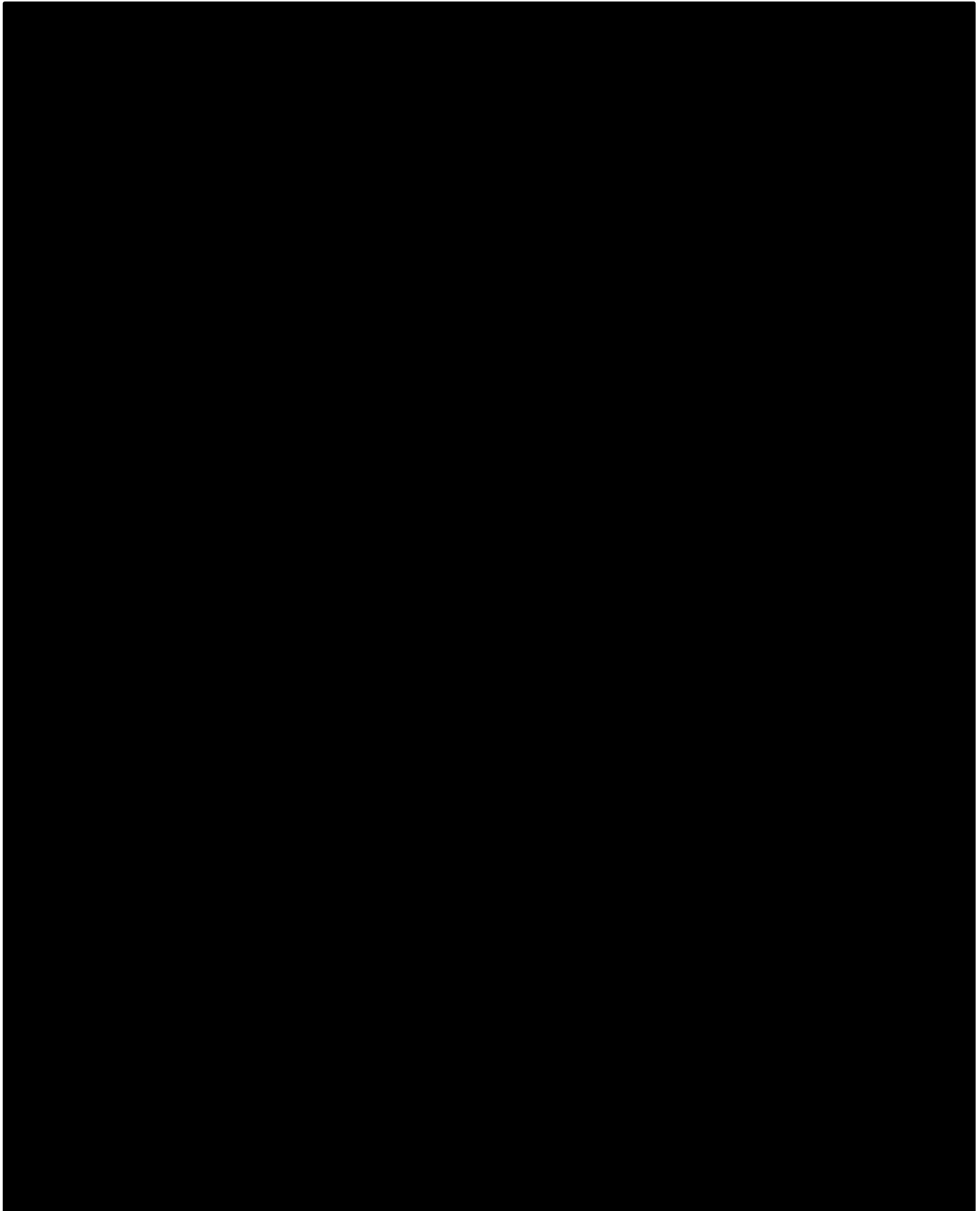
MPX Project – See chart below regarding the critical path items, responsive to Sections, 6.3, 7.2, 10.1 and 14.2.vii. For detailed project schedules, see **CONFIDENTIAL MPX Attachment 10.1**

[REDACTED]











11. Project Management/Experience

11.1 Provide an organizational chart for the project that lists the project participants and identifies the corporate structure, including general and limited partners.

County Line Project - Please see Section 5.2.

MPX Project – Please see Section 5.2.

11.2 For a project that includes new facilities or capital investment, provide statements that list the specific experience of the bidder and each of the project participants (including, when applicable, the bidder, partners, EPC contractor and proposed contractors), in developing, financing, owning, and operating generating or transmission facilities (as applicable), other projects of similar type, size and technology, and any evidence that the project participants have worked jointly on other projects.

County Line Project –

NRG has an established service and supply chain to construct wind energy projects to the highest industry standards. NRG has partnered with Reed & Reed, Inc. and Vestas, Inc. to serve as the General Contractor and turbine supplier.

Vestas

Vestas is the only global energy company dedicated exclusively to wind energy. Founded in 1898 as a blacksmith shop in western Denmark, we started producing wind turbines in 1979, and have since gained a market-leading position with 83 GW of installed wind power and more than 71 GW under service across the globe.

The Vestas 4 MW platform proposed for County Line Wind is designed for a broad range of wind and site conditions enabling delivering industry-leading reliability, serviceability and exceptional energy capture.

The 4 MW platform was introduced in 2010 with the launch of the V112-3.0 MW®. Since then over 13 GW of the 4 MW Platform has been installed all over the world making it one of the most popular and reliable platforms in the Vestas fleet.

Rotor diameters range from 105 to 150 meters and the rated output power is up to 4.2 MW. Using well proven technologies like a full-scale converter, the 4 MW platform meets even the most challenging grid requirements providing excellent energy yield in all wind and weather conditions.

Large Diameter Steel Towers (LDST) are also available to optimize annual energy production on low wind sites.

A proposal from Vestas has been provided in **CONFIDENTIAL CL Attachment 5.2.i.**

Reed and Reed

Reed & Reed has been a family run construction contractor since 1928. The company is one of New England's largest and most versatile contractors, completing numerous public and private projects throughout the Northeast.

Reed & Reed began work in the wind power industry in 2006 during the construction phase of the Mars Hill project, the first commercial grid-scale wind farm in New England. Since then, the company has been involved in the construction of eight total wind projects. Reed & Reed provides a number of services in for the wind power industry, including: civil and site design, electrical design, transmission design, foundation design, and constructability reviews. The company has one of the largest contractor-owned equipment fleets in the Northeast, including two 440 ton Manitowoc 16,000 lift cranes.

A letter of support from Reed & Reed has been provided in **CONFIDENTIAL CL Attachment 11.2.**

MPX Project -

Maine Power Express Development Team	
Name	Responsibility
Maine Power Express, LLC <ul style="list-style-type: none">■ Loring Holdings, LLC■ National Resources Energy, LLC■ Transmission Developers, Inc.	Developer and current owner of MPX <ul style="list-style-type: none">■ Managing Member■ Managing Member■ Member
Con Edison Transmission, Inc.	Funding Development Partner Prospective Owner and Operator

Maine Power Express Project Participants	
Name	Responsibility
Kiewit	Engineering, Procurement & Construction
Mass. Electric Construction Company	Massachusetts/Maine Contractor
Bond Brothers	Massachusetts Contractor
ABB	Vendor for HVDC related equipment
[REDACTED]	Prospective cable providers
Ansonia Partners	Financial Advisor, Modeling Analysis, Risk Analysis
TRC	Permitting, Environmental

Signal Hill Consultants	ISO-NE Consultants
James W. Sewell Company	Maine Field Engineering
Sargent Corporation	Maine Civil Contractor
Goulston and Storrs	Massachusetts Legal Counsel
Rich May, P.C.	Massachusetts Legal Counsel
Eaton Peabody	Maine Legal Counsel
Loring Development Authority	Maine Real Estate
Massachusetts Port Authority	Massachusetts Real Estate

Maine Power Express, LLC - Maine Power Express, LLC ("MPX, LLC") is a Joint Venture between Loring Holdings, LLC [REDACTED], National Resources Energy, LLC [REDACTED] and Transmission Developers, Inc. [REDACTED]. MPX has assembled an expert team of development and strategic partners to design, engineer, permit, finance, construct and operate the MPX Project.

Con Edison Transmission, Inc. - The funding development partner and anticipated owner and operator of the MPX Project is Con Edison Transmission, Inc. ("CET").

CET is a successful developer of transmission projects. CET is the largest partner and currently holds the leadership role within the New York Transco, the electric transmission partnership that includes National Grid, Avangrid, and Fortis. CET has developed successful bids for public policy solicitations. CET constructed and contributed two of the partnership's three projects, both of which began operation. CET is providing on-going O&M services for projects in operation. CET are well positioned with regulators, other utilities, ISOs and policy organizations to identify market and policy needs and to propose new projects. CET is wholly-owned subsidiary of Consolidated Edison, Inc.

For more than 195 years, Consolidated Edison, Inc. ("Con Edison") has served the world's most dynamic and demanding marketplace - metropolitan New York. Con Edison, incorporated in New York State, is a holding company that owns all of the outstanding common stock of CECONY, Orange and Rockland Utilities, Inc. ("O&R"), Clean Energy Businesses ("CEBs") and CET, which was formed in 2014 to invest in electric transmission and gas pipelines.

As one of the largest electric companies in the country and the parent of NYC's local utility, Con Edison possesses unique experience. Indeed, the Con Edison companies are leaders in their specific sectors of the energy businesses. As the electric utility, responsible for reliably providing electric service to more than three million customers in NYC, CECONY understands and has had responsibility for designing and managing the electric grid in NYC for over 130 years. CECONY also has experience in managing programs and aggregate solutions to meet various public policy goals. CEE is a leading third-party energy manager with extensive experience in procuring and delivering renewable power, including in-depth experience

scheduling energy and/or capacity on the Hudson Transmission Line (NJ to NYC), Neptune Cable (PJM to LI), and Cross- Sound Cable (ISO-NE to LI). CED is the fifth largest developer of solar power and a developer of other utility scale renewables, and CES is an experienced developer of distributed renewables, energy efficiency and demand side management solutions. Lastly, CET and NY Transco have demonstrated the ability to develop new transmission to deliver renewable resources.

ABB - ABB is a leader in providing High Voltage Direct Current transmission systems. ABB has been in the HVDC industry for over 60 years and has over 70 HVDC installations worldwide. ABB developed the Voltage Source converter (VSC) technology for HVDC transmission systems in 1997. VSC-based HVDC stations are more compact than older Line Commutated Converter (LCC) based HVDC converter stations of the same capacity, rating, and technical characteristics. This advantage allows VSC based technology to provide reactive power and voltage support services similar to those traditionally provided by generators located near major load centers. Such features are especially important when fossil fueled based local generation is phased out and replaced with renewable resources located far away from major load centers. Moreover, utilizing VSC-based HVDC technology and the polymer insulated DC cables, enables the construction of long-distance underground and submarine cable based transmission systems that are not technically feasible with traditional AC transmission technologies due to charging currents that occur in long-distance AC cables. ABB provides technical oversight and ongoing support for their equipment which is installed in the Con Edison system. This includes but is not limited to high voltage breakers, medium voltage breakers, relay protection systems and transformers. The equipment and services are similar in nature as the MPX Project.

Kiewit - A Fortune 300 company, Kiewit had 2015 revenues of more than \$9 billion and consistently ranks among the top five contractors by Engineering News-Record. Kiewit has virtually unlimited bonding capacity and are one of the few construction firms able to compete for billion-dollar projects. Kiewit is one of North America's largest and most respected construction and engineering organizations. The employee-owned company operates through a network of offices and projects in the United States, Canada and Australia. Nearly all construction projects are staffed by one or more owners of our company. Kiewit and Con Edison have had a long standing relationship with several large infrastructure projects in the Con Edison Service area. Kiewit was the lead contractor on the installation of new 138 kV transmission line which included the construction of a new tunnel under the Harlem River. Kiewit provided critical support in the response to several 138 kV transmission outages which are located under the Queensboro bridge.

Mass. Electric Construction Company - is one of the nation's premier electrical contractors. We are a leader in providing complex and large-scale electrical construction and maintenance services. Our clients include those in power & energy, transportation, industrial and infrastructure markets across North America. We are the industry leader in rail systems installations, with over \$3 billion in transit and rail work completed. We focus on Safety -

Nobody Gets Hurt - and exceeding client expectations by meeting or beating project schedules and budgets.

Bond Brothers – BOND is headquartered 10 minutes from Boston, Massachusetts with offices in Everett and Medford. We are built on a foundation of rock solid values: deep relationships, reliable execution, intelligent solutions and financial strength. A fourth generation, privately held construction management and civil & utility general contracting firm, we are driven forward by listening to the needs of our clients. Our focus is on building a bond of trust that fuels each construction project we undertake. Guiding us since inception, BOND's commitment to excellence has resulted in delivering superior customer service.

Cable Suppliers - For cable, MPX is under negotiations with three reputable cable manufactures:

- [REDACTED]
[REDACTED]
- [REDACTED]
[REDACTED]
- [REDACTED]
[REDACTED]

Ansonia Partners - Formed in 2017 in a merger between a merchant bank (ERM Capital) and a boutique investment bank (TAG Energy Partners), draws together senior finance professionals with over a century of combined experience in energy and infrastructure transactions. We bring together deep relationships in the power and utilities sectors, and strategic investment banking advisory services, including the origination and structuring of complex transactions. We have a unique and specialized focus in power transmission and have advised on multiple large-scale energy infrastructure transactions. Our team of professionals leverages its extensive relationships with asset owners, strategic and financial participants, as well as leading investors in the project, debt and equity markets on behalf of our clients to provide value through access, innovation, and creative solutions.

Signal Hill - LCBB Inc. D/B/A Signal Hill Consulting Group or "Signal Hill" was founded in 1999 as a consulting practice in the energy business with clients that were working on establishment and development of ISO and RTO structures with the goal of producing efficient markets. Much of the firm's continuing work has focused on development and administration of market rules for energy trading in New England as well as negotiating transmission interconnections and transmission access for new market entrants. Its primary client base consists of marketers, developers and generators participating in the New England markets. Signal Hill is actively involved in virtually all aspects of the markets in New England, including those governing energy trading and operations through attendance and active participation at the Markets and Participants Committees as well as the Markets Reliability and Transmission Committees and numerous subcommittees of the New England Power Pool (NEPOOL), the stakeholder group in New England.

TRC - A pioneer in groundbreaking scientific and engineering developments since the 1960s, TRC is a national engineering, consulting and construction management firm providing integrated services to the power, oil and gas, environmental and infrastructure markets. We serve a broad range of clients in government and industry, implementing complex projects from initial concept to operations. TRC has over 4,000 technical professionals and support personnel at more than 120 offices throughout the U.S. Our clients depend on TRC's multidisciplinary teams to design solutions to their toughest business challenges in the energy, environmental and infrastructure markets.

James W. Sewell Company - An integrated team of geospatial, engineering, and natural resource consultants, Sewall partners with clients to create practical sustainable solutions. With a heritage of ethical business practice, Sewall builds enduring relationship based on integrity, objectivity and a broad understanding of our client's business environments. Our success is our client's success, the satisfaction of their stakeholders, and the prosperity of their communities. Sewall has performed significant work in the SL-ROW and their land-owners relationships will be a great asset to MPX.

Sargent Corporation - A Maine-based civil engineering and construction firm, Sargent has an excellent track record of project delivery and safety. In New England, Sargent has constructed the civil infrastructure (access roads and crane pads) for 90% of all the wind energy projects that are currently operating or under construction, most of which are located in Maine. This local, hands-on experience will be a strong benefit to the MPX Project.

Goulston & Storrs - An Am Law 200 law firm, with offices in Boston, New York and Washington, DC. With more than 200 lawyers across multiple disciplines, Goulston & Storrs is a real estate powerhouse with leading-edge corporate, capital markets and finance, litigation, and private client and trust practices. Our lawyers employ a proven team approach that values client outcomes over individual recognition. The firm's dedication to providing prompt, practical legal advice, cost-efficiently and tailored to our clients' business needs, has resulted in Goulston & Storrs being acknowledged for excellence by Chambers USA, BTI's A-Team for Client Service, Best Lawyers in America and other leading industry rankings.

Rich May, P.C. - A Boston-based law firm serving clients throughout the United States and abroad. Since 1937, Rich May has provided knowledgeable, experienced counsel to business and individual clients. Our legal expertise, commitment to service, and steadfast integrity combine to enable us to achieve outstanding results. Our objective is to solve client problems effectively and efficiently, creating value at every opportunity. We represent the newest technology businesses and the most established regulated industries. We embrace high-tech and low-tech. We negotiate and we litigate. From start-ups to multi-nationals, our clients are our lifeblood. Delivering excellence is our objective.

Eaton Peabody - Formed in 1939, Eaton Peabody is a Maine-based law firm with more than 50 attorneys serving New England and Atlantic Canada from offices in Augusta, Bangor, Brunswick, Ellsworth and Portland. The firm offers sophisticated legal expertise that emphasizes responsive

client service. Many of our lawyers are prominent in their fields of practice, and a number have been recognized by their peers in such publications as *Best Lawyers in America*, *Chambers USA*, *Martindale-Hubbell* and *SuperLawyers*.

Loring Development Authority - The mission of the Loring Development Authority ("LDA") is to redevelop the former Loring Air Force Base property, attracting new opportunities for employment and creating new economic activity by reutilizing the extensive real estate assets and supporting infrastructure left by the Air Force. To do this the LDA works with businesses to identify the precise buildings or other real estate assets that are uniquely suited to facilitate a business plan, and developing attractive business terms providing every possible opportunity to grow and prosper. LDA also facilitates interaction with other state and regional economic development entities to assure maximum advantage of available programs and incentives. Finally, LDA assists prospective tenants to gain any regulatory approvals needed to conduct business.

Massachusetts Port Authority - At the Massachusetts Port Authority, our history is long, our responsibilities serious and our mission unwavering: to connect Massachusetts and New England to the world, safely, securely and efficiently, never forgetting our commitment to our neighbors who live and work around our ports and facilities. We're expanding Boston's global reach by increasing the number of nonstop domestic and international flights from Logan Airport. We're advancing Massachusetts' working maritime tradition by protecting thousands of good-paying blue-collar jobs connected to the Port of Boston. And we're demonstrating our commitment to being a good neighbor to those who live and work near Massport facilities by strengthening our community engagement efforts. Every day, we strive to be a good steward in service of a great Commonwealth.

11.3 For a bid that includes existing facilities, provide statements that list the specific experience of the bidder and each of the project participants (including, when applicable, the bidder, partners, EPC contractor and proposed contractors), in owning and operating generating or transmission facilities (as applicable), other projects of similar type, size and technology, and any evidence that the project participants have worked jointly on other projects.

County Line Project - The County Line Project is a new facility.

MPX Project - The MPX Project is a new facility.

11.4 Provide a management chart that lists the key personnel dedicated to this project and provide resumes of the key personnel. For Eligible Facilities or Transmission Projects that are not yet in-service, key personnel of the bidder's development team having substantial project management responsibilities must have:

- i. Successfully developed and/or operated one or more projects of similar size or complexity or requiring similar skill sets; and

- ii. *For a project that includes new facilities or capital investment, experience in financing power generation projects (or have the financial means to finance the project on the bidder's balance sheet)*

County Line Project - NRG's project team will lead development, financing, and construction of the proposed project. Key personnel from this team include the following staff members. Each member of the project team has experience developing projects of a similar nature to County Line Wind.

Please refer to Section 5 for information regarding NRG's financial strength.

Project Team

Name	Title	Responsibility
Ben Fairbanks	Sr. Director, Wind Development	Development lead
Mike Herfurth	Sr. Director, Construction	Construction/Engineering lead
Dan von Allmen	Development Manager	Development
Aarty Joshi	Sr. Manager, Environmental Permitting	Permit lead
Guillermo Robles	Lead Wind Project Engineer	Layout design, energy projects, suitability
Patrick Sullivan	VP, Development	Oversees all development activities
Valerie Wooley	Sr. Director, Origination	Power marketing and sales
Brian Magner	VP, Project Finance	Oversees project financing
Mitch Samuelian	VP, Operations	Operations and Maintenance
Caryl Karnick	Senior Counsel	Project attorney

Corporate Oversight

Name	Responsibility
Verril Dana	Legal Counsel
Stantec	Permitting lead, noise
Stantec	Natural resource assessment
TRC/Northeast Cultural Resources	Cultural resources lead
Westslope Consulting	FAA
Evans Engineering Solutions	Microwave/Telecommunications
Davies Public Affairs	Public Affairs
James Sewall Company	Field Engineering
SGC Engineering	Electrical Design
SW Cole Engineering	Geotech
Turbines	Vestas
Reed and Reed	EPC Contractor
TJD&A	Visual
Bodwell EnviroAcoustics	Sound

Patrick Sullivan

Vice President, Business Development

Mr. Sullivan leads NRG Renewable's Project Development team. He joined NRG in 2013 and brings more than a decade of experience in project development, origination, project finance, M&A and partnership management to his role at NRG, where he leads a multi-disciplinary team of developers and technical experts responsible for delivering NRG's growing portfolio of distributed generation and utility-scale wind and solar projects into construction. Previously, Patrick co-led NRG Renewable's M&A team, focused on distributed generation and community solar projects. Prior to NRG, Mr. Sullivan Senior Director of Business Development BrightSource Energy, a leading global developer of utility scale solar thermal power projects. Additionally, Mr. Sullivan originated project development and partnering opportunities in the U.S., South Africa, China, India and North Africa. Mr. Sullivan began his career as an investment banker in the M&A groups of Lehman Brothers and Legacy Partners. Patrick received an A.B. in History from Princeton University and an MBA from the Darden Graduate School of Business Administration at the University of Virginia.

Logan Granger

Vice President, Engineering & Technical Operations

Mr. Granger brings more than 12 years of technical leadership experience in renewable energy development and construction, and has been directly involved in the contracting, design, and construction of over 2GW of solar and wind projects in the US and globally. Currently he is responsible for providing technical support to NRG's full portfolio of renewable projects, including technology innovation, project engineering, and owner's engineering. Prior to joining NRG, Mr. Granger's roles included Director of Development Engineering for First Solar and Vice President of EPC for 8minutenergy Renewables. Before entering renewable energy, Mr. Granger practiced architecture in the design-build construction industry. He holds a Masters in Architecture from Harvard University.

Ben Fairbanks

Senior Director, Wind Development & Strategy

Mr. Fairbanks is a Senior Director leading NRG's Wind Development and Strategy initiatives. He has successfully developed over 1 GW renewable energy from concept through construction totaling over \$1.5 billion in investment. Mr. Fairbanks previously worked as a Senior Development Director for SunEdison where his responsibilities included renewable energy project development, mergers & acquisitions, and market assessment. While with SunEdison Mr. Fairbanks led development activities through the construction of South Plains Wind Phase I (200 MW) & Phase II (300.3 MW) and Idaho Solar (100 MW). Mr. Fairbanks spent eight years with Frist Wind before SunEdison's acquisition of First Wind where he developed a pipeline of over 2500 MW of energy projects including the successful completion of Route 66 Wind (150 MW), Palouse Wind (105 MW) and Milford Wind Corridor (300 MW). Mr. Fairbanks previously worked with Tetra Tech, Inc. as a Project Manager; managing environmental and engineering tasks for over fifty thermal and renewable energy projects. Mr. Fairbanks has a Bachelor's in Environmental Science from Western Washington University's Huxley College and has completed graduate courses in Business Administration.

Valerie Wooley

Sr. Director, East Origination

Mrs. Wooley brings more than 16 years of experience in wholesale structured and non-structured transactions in the energy sector, focusing on the deregulated markets in the east region, including NYISO, PJM Interconnect and ISO-NE. Her expertise includes developing leads, cultivating customer relationships and account management, with a proficiency in contract restructuring, strategic product placement, product differentiation and non-tangible attributes. Given the experience of weathering two mergers, three name changes, a bankruptcy and an IPO, Mrs. Wooley is uniquely qualified in dealing with financially challenged institutions, enabling transactions through innovative credit/collateral solutions and adept at consultative and relationship selling. Prior to working in the energy industry, Mrs. Wooley held various positions within Westvaco Corporation, including New Market Development Manager, Storage Product Manager and S&D Project Manager. She holds an MBA from the Fuqua School of Business at Duke University and a BS in Chemical Engineering from the University of Virginia.

David Cavanaugh

Director, Regulatory & Market Affairs ISO-NE

Mr. Cavanaugh is responsible for managing NRG's interests in the ISO New England and NEPOOL stakeholder process. In his role Mr. Cavanaugh also provides inward facing support to NRG's Legal, Development, Asset Management and Commercial Operations business units in pursuit of NRG's objectives in New England. Over his 30 plus years in the energy industry Mr. Cavanaugh has held positions in Investor Owned Utilities, ISO/RTO organizations, and Public Power. Before joining NRG Energy Inc. he served as the first Manager of Regulatory Affairs for Energy New England LCC, an energy cooperative managing energy procurement and power market services for municipal power systems across New England. Prior to Energy New England LLC he spent 13 years at ISO New England Inc. in various leadership roles in the Markets Operations division including Director of Market Services. In this role Mr. Cavanaugh had direct control and responsibility for market facing business operations such as customer support, market asset registration, auditing and performance monitoring. Mr. Cavanaugh also spent 15 years at Northeast Utilities (now Eversource) where he held numerous positions ranging in scope from generating plant operations, corporate support staff, and conservation and load management where he managed NU's Demand Response and Energy Efficient participation in the ISO New England Forward Capacity Market.

Guillermo Robles

Lead Wind Project Engineer

Mr. Robles is NRG's Lead Wind Project Engineer. Mr. Robles has been working in renewable energy since 2005 with roles as Director of Energy Resources at First Wind and as Director of Wind Resource at SunEdison. He led teams working on the development and operation of utility scale wind and solar project with responsibility for resource assessment, power performance testing, M&A due diligence, turbine selection, layout design, solar engineering, operational improvement projects and greenfield prospecting. He has been directly involved in the design of over 1 GW of constructed utility scale wind projects, 30 MW of solar and due diligence on 3+ GW of acquisitions on all stages of development and operation. Mr. Robles holds a BS in Mechanical and Electrical Engineering from Universidad Iberoamericana and an MSc in Renewable Energy Systems and Technology from Loughborough University.

Daniel von Allmen

Development Project Manager

Mr. von Allmen has been working in the renewable energy industry for more than five years, with a strong focus on project development in New England. At NRG, Mr. von Allmen has managed or contributed to the development and execution of roughly 15 MW of solar projects in Massachusetts, spanning National Grid and Eversource territories. Mr. von Allmen also currently serves as the Project Manager for over 100 MW of utility solar in Hawaii. Prior to joining NRG, Mr. von Allmen worked on the Northeast Project Development team at SunEdison, where he contributed to growing and developing the company's industry-leading pipeline of commercial and community solar assets across the region. Mr. von Allmen also previously worked as a Consultant at Sustainable Energy Advantage, a Framingham, MA based consulting firm focused on renewable energy markets and policy, where he managed the firm's SREC and

REC forecast products, and supported a number of regional policy analyses, including RPS/procurement analyses for Massachusetts, Connecticut, and Rhode Island. Mr. von Allmen has a Bachelor's in Environmental Science from Skidmore College, and a Master's in Energy and Environmental Analysis from Boston University.

Aarty Joshi

Senior Manager, Environmental Permitting

Ms. Joshi brings more than 15 years of land use and permitting experience in the energy sector to NRG's utility-scale and distributed generation wind and solar group. Prior to joining NRG, Aarty managed permitting and environmental review processes for 1,600 MW of utility-scale renewable energy projects at CH2M. Aarty has extensive experience with managing complicated field surveys, including wetlands, wildlife, rare plants, and cultural resources, and preparation of technical reports in support of first- and third-party environmental documents pursuant to the federal National Environmental Policy Act (NEPA), and state environmental regulations including California Environmental Quality Act (CEQA). Aarty holds a MS in Planning from the University of Toronto and a BS in Environmental Science from the University of Guelph, Canada.

MPX Project-

Project Team

Name	Title	Responsibility
Hayes Gahagan	Managing Member, MPX LLC	Development - Maine
Scott Houldin	Member, MPX LLC	Development - Massachusetts
Ryan Gahagan	Project Manager, MPX LLC	Project Manager
Mike McGrath	Real Estate/Gov. Relations, MPX LLC	Massachusetts Real Estate & Government Relations
Timothy Frost	Vice President, Con Edison Transmission	Development & Finance
Victor Mullin	Chief Engineer, Con Edison Transmission	Chief Engineer
Elizabeth Griffin	Manager – Development, Con Edison Transmission	Development, Economic analysis, Modeling
Kathy Buerger	Senior Cost Estimator, Con Edison	Construction estimation

Hayes Gahagan

Managing Member, Maine Power Express, LLC

Hayes Gahagan is a principal of The Maine Power Express. He is the founder, lead entrepreneur, principal developer and one of the owners of Loring Holdings, LLC, developer of the Loring Energy Projects at the former Loring Air Force Base in Limestone, Maine. As Managing Member, Mr. Gahagan is responsible for day-to-day management of technical, economic, environmental, legal and regulatory matters for the project owners. As a former legislator, he has been involved in various business-related assignments, including drafting of legislation, presentations at legislative hearings, special boards and commissions, and Governors advisory groups with

specialty focus on U.S., New England and Maine energy policy, environmental affairs and economic development. Mr. Gahagan was elected to the Maine House of Representatives and the Maine Senate, serving as a member of the Joint Standing Committee on Appropriations and Financial Affairs. Mr. Gahagan received his BA and MA from the University of Maine and completed graduate studies in International Law and Economics at Manchester College, Oxford.

Scott Houldin

Managing Member, Maine Power Express, LLC

Scott Houldin is a principal of the Maine Power Express. He has been actively engaged in the National Resources Group of companies since inception, handling risk management and development of several projects and leading all energy initiatives including infrastructure development with a focus on HVDC sub-marine transmission lines. Mr. Houldin has primary responsibility for directing all aspects of project development, permitting and risk management. Mr. Houldin graduated from Denison University with a BA in Economics.

Ryan Gahagan

Project Manager, Maine Power Express, LLC

Ryan has served as Project Manager for the Maine Power Express since 2012. Ryan develops economic models, manages Maine Public Utilities Commission (MPUC) regulatory proceedings, drafts proposals, motions, reports and other filings, conducts research and analysis on Maine and New England energy matters, performs geospatial research and mapping, participates in regional energy industry organizations, manages the MPX PR, communications and IT, and interfaces with outside engineering, permitting and regulatory consultants and attorneys. He received his BA in Communications from Gordon College in Wenham, MA in 2002.

Mike McGrath

Real Estate & Government Relations, Maine Power Express, LLC

Michael McGrath has been affiliated with MPX for the past six(6) years. Mr. McGrath's experience within the city of Boston has been instrumental in evaluating land sites and coordinating multiple city, state and Federal agency introductions to the MPX Project.

Timothy Frost

Vice President, Con Edison Transmission

Mr. Frost is Vice President of Con Edison Transmission, involved in the creation of CET. He is responsible for Finance, Corporate Development, and Electric Transmission Development for CET. Mr. Frost's previous was that of Director of Strategic Planning for Consolidated Edison. His Prior to joining Consolidated Edison in 1996, Mr. Frost was an investment banker with Credit Suisse First Boston calling on domestic and international utilities. Mr. Frost spent seven years following graduate school with Booz Allen & Hamilton, as a management consultant in both their strategy practice and the technology practice focused on energy, chemicals, computers, and pharmaceuticals industries. Mr. Frost holds a Masters of Business Administration from the University of Chicago and a B.A. in economics from Macalester College.

Victor Mullin

Chief Engineer, Con Edison Transmission

Mr. Mullin has over 35 years of Electric utility experience. His experience includes key management positions in engineering, project management, operations and maintenance areas with knowledge of Business applications, Operations, Quality Assurance, Maintenance and Design and Licensing Basis. He has lead the engineering efforts for several large transmission projects including the construction of several substations. He brings knowledge from the Electric, Gas, Steam and Nuclear aspects of the utility industry. Mr. Mullin holds an M.S. in Management Science and a B.S. in Nuclear Science and is currently a member of the ASME Industry Advisory Board.

Elizabeth Griffin

Manager, Con Edison Transmission

Ms. Griffin has nearly a decade of experience in the utility industry. At Con Edison, Ms. Griffin used GE-MAPS and other tools to evaluate the reliability and wholesale energy market impacts of proposed infrastructure projects and policy changes. She led the modeling for the cost-benefit analysis for the Transmission Owners Transmission Solution proposal to the New York Public Service Commission. These projects were selected for development by the PSC and are currently in operation under the ownership of the New York Transco. She also represented Con Edison on the Long Island – NYC Offshore Wind Collaborative. Ms. Griffin joined Con Edison Transmission at its origination early last year and has been a key player in over \$1.5 billion of project acquisitions. Prior to joining Con Edison, she worked in Process Improvement at National Grid. Ms. Griffin holds an MBA and an MS in Natural Resources from the University of Michigan and a BA from Georgetown University.

Katherine Buerger

Senior Cost Estimator, Con Edison

Ms. Buerger is a lead senior cost estimator for Con Edison. Since 2001, she has developed appropriation level cost estimates for major gas, steam and electric transmission systems, both inside and outside of Con Edison's service territory. Currently, she develops appropriation level cost estimates for steam generating station repowering, including new CTG and HRSG installations, oil to gas conversion systems for power boilers, and major water treatment system upgrades for all of Con Edison's steam generating stations. She develops cost estimates for new 345 kV and 138 kV transmission substations and existing electric substation upgrades. Experience includes development of conceptual cost estimates for third party interconnection projects, future load growth and relief projects, green energy parks, wind and solar generators, and new multistory workout centers and parking garages. Prior to joining Con Edison's estimating group, she spent 25 years in the nuclear power industry working for engineering firms including Duke Energy and ABB Impell, where her responsibilities included modelling, analyzing and qualifying Class I, II and III nuclear piping systems and preparing 10CFR50.59 safety evaluations.

11.5 Provide a listing of all projects the project sponsor has successfully developed or that are currently under construction. Provide the following information as part of the response:

- i. Name of the project
- ii. Location of the project
- iii. Project type, size, and technology
- iv. Commercial operation date
- v. Estimated and actual capacity factor of the project for the past three years
- vi. Availability factor of the project for the past three years
- vii. References, including the names and current addresses and telephone numbers of individuals to contact for each reference

County Line Project - NRG owns and operates approximately 50,000 MW of generation capacity nationwide, including more than 134 conventional generation plants in 29 states. NRG Energy's approximately 4,800 MWAC of wind and solar generation assets make us the third-largest, utility-scale renewable energy generator in North America. The table below lists all of NRG's wind projects in operation or under construction.

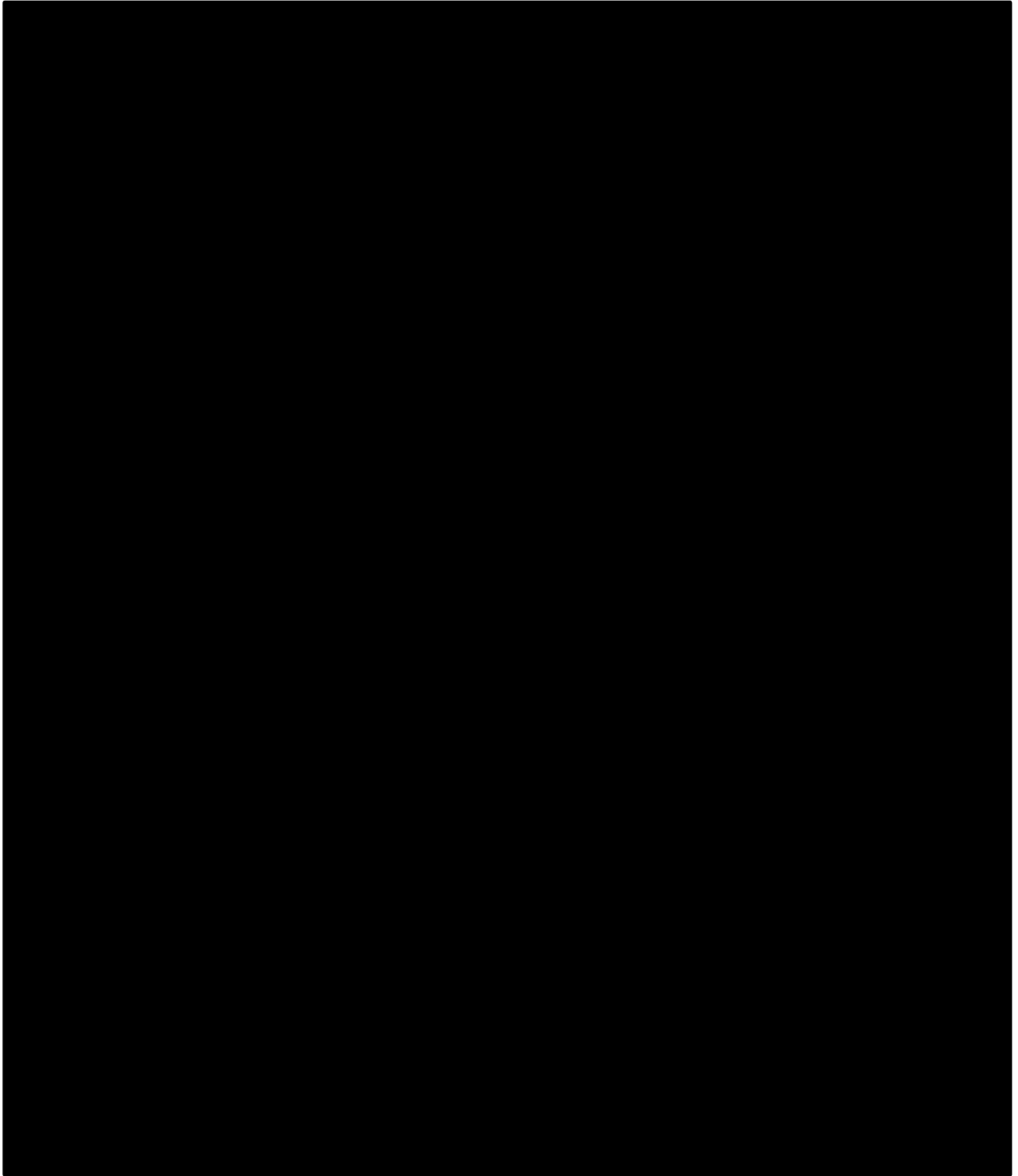
NRG Wind Projects

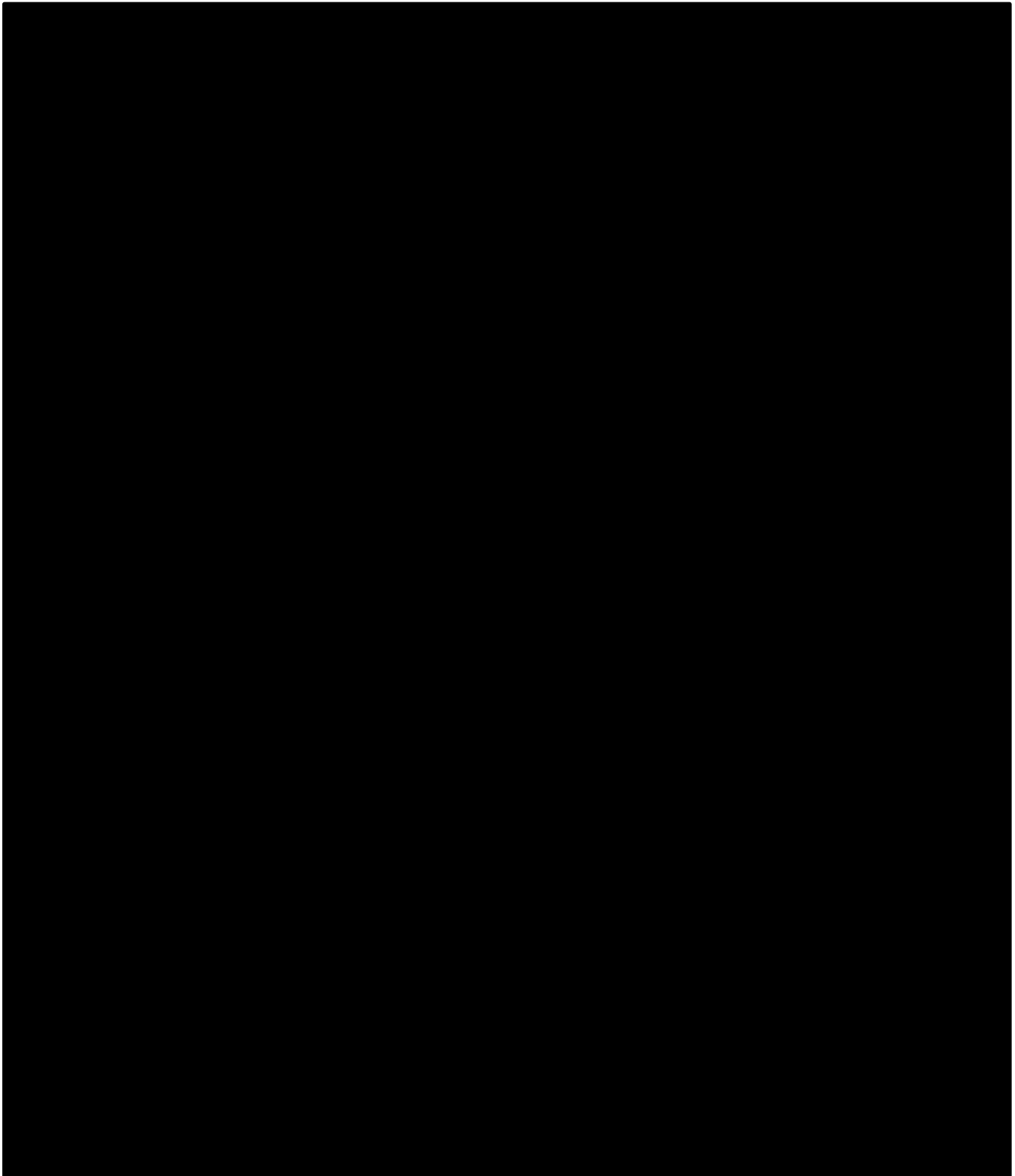
Project	State	Date Complete	Technology	Capacity Factor	% Ownership	Generation Owned (MW)	Total System Size
Alta	CA	Dec. 2010	Vestas/GE	24.47%	100%	947	947
Bingham Lake	MN	Jun. 2006	Suzlon	33.82%	99%	15	15
Broken Bow I	NE	Dec. 2012	GE	45.99%	16%	13	80
Buckthorn Wind	TX	In Construction	Vestas	48%	100%	101	101
Buffalo Bear	OK	Nov. 2008	Suzlon	38.47%	100%	19	19
Cedro Hill	TX	Nov. 2010	GE	37.15%	31%	47	150
Community Wind North	MN	May 2011	Clipper	37.86%	99%	30	30
Crofton Bluffs	NE	Nov. 2012	Suzlon	51.12%	20%	8	42
Crosswinds	IA	Jun. 2007	Suzlon	41.68%*	99%	21	21
Eastridge	MN	Apr. 2006	Suzlon	31.69%*	99%	10	10
Elbow Creek	TX	Dec. 2008	Siemens	33.09%	100%	122	122
Elkhorn Ridge	NE	Mar. 2009	Vestas	38.01%	67%	54	80
Forward	PA	Apr. 2008	Suzlon	23.53%	100%	29	29

11. Project Management/Experience

Project	State	Date Complete	Technology	Capacity Factor	% Ownership	Generation Owned (MW)	Total System Size
Goat Mountain I	TX	Apr. 2008	Mitsubishi	30.93%	100%	80	80
Goat Mountain II	TX	Jun. 2009	Mitsubishi	30.93%	100%	70	70
Hardin	IA	May 2007	Suzlon	37.57%*	99%	15	15
Jeffers	MN	Oct. 2008	Clipper	40.66%	100%	50	50
Langford	TX	Dec. 2009	GE	39.96%	100%	150	150
Laredo Ridge	NE	Feb. 2011	GE	49.31%	100%	80	80
Lookout	PA	Oct. 2008	Suzlon	33.33%	100%	38	38
Mountain Wind I	WY	Jul. 2008	Suzlon	31.90%	31%	19	61
Mountain Wind II	WY	Sep. 2008	Suzlon	32.13%	31%	25	80
Odin	MN	May 2008	Suzlon	37.59%	100%	20	20
Pinnacle	WV	Dec. 2012	Mitsubishi	36.75%	100%	55	55
San Juan Mesa	NM	Dec. 2005	Mitsubishi	34.89%	75%	90	120
Sherbino	TX	Oct. 2008	Vestas	31.53%	50%	75	150
Sleeping Bear	OK	Oct. 2007	Suzlon	36.05%	100%	95	95
South Trent	TX	Jan. 2009	Siemens	36.94%	100%	101	101
Spanish Fork	UT	Jul. 2008	Suzlon	27.12%	100%	19	19
Spring Canyon II & III	CO	Oct. 2014	GE	41.89%	90%	54	60
Taloga	OK	Jul. 2011	Mitsubishi	40.24%	100%	130	130

MPX Project –





11.6 With regard to the bidder's project team, identify and describe the entity responsible for the following, as applicable:

i. *Construction Period Lender, if any*

County Line Project - While specific lenders have not yet been selected for the Project, prior lenders for NRG projects include, but are not limited to, [REDACTED].

MPX Project - MPX anticipates securing construction period financing from vendors where possible.

ii. *Operating Period Lender and/or Tax Equity Provider, as applicable*

County Line Project - While an operating period lender or tax equity has not yet been selected for the Project, prior tax equity providers for NRG projects include [REDACTED].

MPX Project - An operating period lender has not yet been selected for the Project.

iii. *Financial Advisor*

County Line Project - NRG's in-house finance group manages financial planning, analysis, and risk assessment activities.

MPX Project - Ansonia Partners is advising CET on financial planning, analysis, and risk assessment activities.

iv. *Environmental Consultant*

County Line Project - Stantec Consulting serves as the lead consultant on permitting and resource surveys for the Project. See Section 11.4 for additional details.

MPX Project - TRC - <http://www.trcsolutions.com>

v. *Facility Operator and Manager*

County Line Project - NRG will operate County Line Wind. NRG is the 5th largest owner/operator of wind projects in the United States.

MPX Project - MPX and CET, will operate and manage the MPX Project along with additional contracted support.

vi. *Owner's Engineer*

County Line Project - NRG has utilized a number of engineering firms including Burns & McDonnell, Sargent & Lundy and AECOM.

MPX Project - Con Edison, Inc. internal resources

vii. *EPC Contractor (if selected)*

County Line Project – A proposal from Reed & Reed has been provided as
CONFIDENTIAL CL Attachment 5.2.i.

MPX Project – Kiewit – <http://www.kiewit.com>

viii. Transmission Consultant

County Line Project - The electrical engineering firms NRG has utilized in the past and under consideration for the Project include Power Engineering and Burns & McDonnell.

MPX Project – Signal Hill and Con Edison, Inc. internal resources

i. Legal Counsel

County Line Project - NRG's in-house legal organization provides legal support across all disciplines. EB Energy Law is advising NRG as outside counsel for PPA and transmission issues, while Verrill Dana LLP is providing outside counsel support for permitting and real estate issues. Outside counsel for project financing has not yet been selected.

MPX Project – Con Edison, Inc. internal resources but may choose to contract with outside resources

11.7 Provide details of the bidder's experience in ISO-NE other Markets affected by the bid. With regard to bidder's experience with ISO-NE markets, please indicate the entity that will assume the duties of Lead Market Participant for your Project. Please provide a summary of the proposed Lead Market Participant's experience with each of the ISO-NE markets.

County Line Project - The project entity, County Line Wind, LLC, will be the Lead Market Participant for the Project. NRG Energy Inc. will provide the staffing and expertise behind the Project's participation in ISO-NE. NRG Energy Inc. is among the largest generating resource owner/operator within the New England markets, and the United States, with extensive experience and expertise with all aspects of ISO New England market participation including qualification and participation the Forward Capacity Market (FCM), bidding and scheduling within the day-ahead and real-time energy markets and ancillary service markets, and as a Designated Entity responsible for receiving and responding to ISO New England dispatch signals and requests.

MPX Project – MPX has retained the services of Signal Hill Consultants to represent the MPX project with ISO-NE. (Please see above for details on experience). MPX has utilized internal representatives from Con Edison Energy ("CEE") that are active in ISO-NE markets

12. Emissions

12.1 For existing generation facilities, provide emissions estimates based on available continuous emissions monitoring data. Where continuous emissions monitoring data is not available, provide emissions estimates based on the most recent stack emissions test conducted using an EPA reference method approved by the applicable permitting and enforcement authority. Where continuous emissions data or actual stack emissions test data are not available, provide emissions estimates based on emissions factors from the latest edition of EPA's AP-42, Compilation of Air Pollutant Emissions Factors.

For new generation facilities, provide emissions estimates based on available data from the unit manufacturer. Alternatively, provide actual emissions data determined in accordance with the paragraph above for a similar facility built within the past 3 years. Include copies of supporting documentation for all emissions estimates.

County Line Project - The proposed project utilizes wind turbine technology, which does not emit any air pollutants and will help displace other fossil-fired generation. Air emissions resulting from construction vehicles will be minimal due to the short duration of construction.

Emissions Avoidance

As an "as-available" resource within ISO-NE's pooled generation and transmission control area, the Project will offset generation and associated pollution from both in-state and out-of-state power plants. The Project offsets greenhouse gas and particulate matter emissions at approximately the average emissions rates for the NPCC New England region using the Environmental Protection Agency's ("EPA") eGRID 2012 results.

Project Pollution Avoidance

Pollutant	NPCC NE Rate (lb/MWh)	Project Avoidance (tons)
Carbon dioxide	570.9	488,739
Methane	96.0	82,184
Nitrous oxide	12.8	10,958
Carbon dioxide equivalent	576.8	493,790
Nitrogen oxides	0.5	428
Sulfur dioxide	0.2	171

MPX Project - N/A

12.2 Describe any past investments that will, or have been made to your facility to improve its emissions profile or any planned future investments made to your facility in order to improve its emissions profile. Pollutant specific emissions improving technologies include, but are not limited to:

County Line Project-

- NOx- Selective/Non-Selective Catalytic Reduction
- Sox- wet/dry scrubbers
- PM- fabric filter/bag house, electrostatic precipitator, cyclone separator
- CO- oxidation catalyst
- Investments that improve overall emissions include, but are not limited to:
- Equipment tune-ups (improves combustion efficiency and emissions)
- Boiler tube replacements (improves heat transfer efficiency and reduces fuel use)
- Other efficiency improvements (e.g., installing a heat exchanger to use waste heat to pre-heat feed water to the boiler)
- Include control equipment specifications, date(s) of installation, expected life of equipment, benefits gained from the addition of such equipment, etc.

MPX Project - N/A

12.3 Describe how your project will contribute to the Massachusetts 2008 Global Warming Solutions Act (GWSA) and the 2010 Clean Energy and Climate Plan for 2020. Describe how your project will contribute both to the short term 2020 goal, and longer term 2050 goal found in these laws.

County Line Project- County Line Wind is well-suited to the New England region's short- and long-term energy and climate goals. NRG Energy's proposal can contribute to the Procuring States' cross-cutting effort to meet the long-term challenge of providing reliable and affordable energy in the face of changing climate conditions and increasingly constrained infrastructure, as recently articulated in the New England Governors' Statement on Regional Cooperation on Energy Infrastructure.

Specifically, County Line Wind will address the following Procuring States' energy and climate goals as found in Connecticut Public Act 08-98, the Massachusetts 2008 Global Warming Solutions Act and the 2010 Clean Energy and Climate Plan for 2020, and the Rhode Island Chapter 39-31:

- Ability to Meet Regional Energy Needs: County Line Wind serves the Procuring States' energy procurement with scale. The Project would deliver over 279 GWh of clean energy annually, avoiding 89,115 tons of CO₂e emissions, and other greenhouse gases as described in Section 12.1, that would result annually from conventional ISO-NE sources.

- **Contribution to Reliability and Load Requirements:** The Project will provide reliability benefits by adding 85.8 MW of incremental energy and capacity to the ISO-NE region, thereby increasing supply reserve margins. In addition, County Line Wind is a winter peaking resource, strengthening system reliability during the winter months when gas supplies tend to be tightest.
- **Mitigation of Energy Price Volatility:** The Project will provide 85.8 MW of energy and RECs to the EDCs through a cost-effective, stable contract price, mitigating the negative economic effects resulting from rising and increasingly volatile natural gas and conventional electricity prices in the region.
- **Diversification of Supply Portfolio:** County Line Wind is a low carbon energy source, representing a diversification away from conventional energy sources as well as New England's increasing reliance on natural gas. Located in Maine and delivering electricity via new transmission, the Project advances the Procuring States' coordinated strategy for regional energy infrastructure investment.

MPX Project – Simply put, the MPX Project delivers Clean Energy Generation to Massachusetts, thereby enabling the carbon emissions reductions sought in the above-mentioned laws. The MPX Project provides access to superior domestic (Maine) RPS Class I wind resource as well as easy access to existing Canadian and Maine hydro via an existing transmission line. By creating access to the transmission constrained renewables, more resources will be made available to consumers in Massachusetts.

13. Contribution to Employment and Economic Development and Other Direct and Indirect Benefits

13.1 Please provide an estimate of the number of jobs to be created directly during project development and construction (for a project that includes new facilities or capital investment), and during operations, and a general description of the types of jobs created, estimated annual compensation, the employer(s) for such jobs, and the location. Please treat the development, construction, and operation periods separately in your response.

County Line Project -

The following estimates of job creation potential are based on NRG's past experiences and divided by project phase:

Development Phase

Development staffing consists of two Full Time Equivalent ("FTE") positions at NRG, and part-time support from many other NRG personnel and departments. The NRG development team operates in various offices across the country, but most positions are based in Princeton and San Francisco, and total nearly 300 employees dedicated to NRG's C&I and utility-scale renewable energy business. Jobs associated with development and corporate administration typically pay competitive wages between approximately \$40,000 and \$300,000.

Development activities are also supported by 3rd party consultants, including environmental/geo-technical firms, the turbine vendor, the EPC contractor, and law firms. These firms are based predominantly within New England.

Construction Phase

NRG has considerable experience managing the construction of utility-scale renewable energy projects across the country. Today, we have over 400 MW of projects under construction, with another 400 MW slated to break ground later this year. To further assist with design and construction planning, NRG has engaged Reed & Reed, a Woolwich, Maine base general contractor specializing in the construction of wind facilities. Reed & Reed has constructed over 1,000 MW of wind in New England, representing the vast majority of installs in the region.

On average, the projects have required 8,000 labor-hours per wind turbine installed, inclusive of civil engineering, foundation work, turbine erection, and collection/BOP construction. Generator leads have required about 2,400 labor-hours per mile installed. And commissioning by the turbine manufacturer requires between 5,000-10,000 labor hours cumulatively Overall, NRG and Reed & Reed estimate that roughly 600 Maine construction jobs would be created over

13. Contribution to Employment and Economic Development and Other Direct and Indirect Benefits

the construction period of this project. This workforce would have a total estimated payroll of \$100 million. The project would also be expected to generate between \$7 and \$10 million in new sales tax revenue for the State of Maine.

Operations Phase

County Line Wind is expected to require between 15-20 full-time operations staff. We assume that the turbine manufacturer will generally provide employee-to-turbine staffing for turbine maintenance of roughly 1:10, meaning 15 wind technicians, plus an additional 2-3 full-time NRG employees. The NRG positions include site supervisor, manager, and administrative roles. The salaries for these positions range from roughly \$30,000-100,000.

In addition to on-site staff, NRG will utilize a centralized monitoring system through our control center in Scottsdale, Arizona which monitors a combined solar and wind portfolio of more than 3,000 MW's. In most occasions issues can be resolved remotely, or when necessary our work order tool streamlines the dispatch of regional maintenance personnel to perform actions at the site.

For additional details on NRG's Operations and Maintenance capabilities, please reference **CONFIDENTIAL CL Attachment 9.1**.

MPX Project –

The following are estimates of job creation during development, construction and operations. These estimates have been provided by our EPC contractor, equipment manufacturer, cable provider, numerous consultants and internal MPX staffing.

Development Phase:

Direct jobs created during the development phase will include full time MPX employees such as engineers, legal, administration, project development and permitting. In addition, third party contactors, engineers and legal will be hired. The following table is an overview of the direct jobs created:

Phase	# jobs	Job Description	Est. Annual Compensation	Employers (categories)	Location Maine	Location MA
Development	100	Staff OEM	\$50K-\$150K \$75K-200K	EPC OEM	60 15	10 15

Construction Phase:

Direct jobs created during the construction phase will include full time MPX employees such as engineers, legal, administration, project development and permitting. In addition, third party contactors, laborers, civil works, marine, engineers and legal will be hired. The following table is an overview of the direct jobs created:

13. Contribution to Employment and Economic Development and Other Direct and Indirect Benefits

Phase	# jobs	Job Description	Est. Annual Compensation	Employers (categories)	Location Maine	Location MA
Construction	520	Staff	\$50K - \$150K	EPC	65	20
		Sub Cont.	\$40K- \$200K	Trades	50	25
		Trades	\$75K-\$125K	Trades	225	75
		Marine	\$90K-\$140K	Trades	10	10
		Splicers	\$80K-\$140K	OEM	15	5
		OEM	\$75K-\$200K	OEM	10	10

Operations Phase:

Direct jobs created during the operations phase will include full time MPX Project employees such as engineers, legal, administration and O&M. In addition, third party contactors, engineers and legal will be hired. The following table is an overview of the direct jobs created:

Phase	# jobs	Job Description	Est. Annual Compensation	Employers (categories)	Location Maine	Location MA
Operations	20	Staff	\$50K-\$150K	MPX	3	3
		OEM	\$75K-\$200K	OEM	2	2
		Support	\$50K-\$150K	MPX	5	5

13.2 Please provide the same information as provided in response to question 13.1 above but with respect to jobs that would be indirectly created as a result of the proposed project.

County Line Project – Results of prior research and historical guidance from Reed & Reed shows that projects have created roughly four indirect jobs per wind turbine installed. For the purpose of the study, indirect jobs include those for which a portion of their incomes earned derived from the direct spending associated with the projects. This would total roughly 600 additional indirect jobs for this project.

MPX Project - The secondary effects (indirect and induced jobs) have been estimated utilizing conservative industry standard multipliers.

13. Contribution to Employment and Economic Development and Other Direct and Indirect Benefits

Development Phase:

The secondary jobs created by the MPX Project development activities will be in sectors closely related to permitting, engineering and procurement such as consultants, engineers, environmental, surveyors, and legal.

Phase	# jobs	Job Description	Est. Annual Compensation	Employers (categories)	Location Maine	Location MA
Development	90	Indirect	\$50 -\$100k	Various	67	23

Construction Phase:

The secondary jobs created by the MPX Project construction activities will be in sectors closely related to the construction industry such as: laborers, truckers, hospitality, food services, wholesale trade businesses, real estate establishments, hospitals, health practitioners, retail, and others.

Phase	# jobs	Job Description	Est. Annual Compensation	Employers (categories)	Location Maine	Location MA
Construction	750	Indirect	\$50 -\$100k	Various	562	188

Operations Phase:

The secondary jobs created by the MPX project operations activities will be created by additional household spending.

Phase	# jobs	Job Description	Est. Annual Compensation	Employers (categories)	Location Maine	Location MA
Operations	15	Indirect	\$50 -\$100k	Various	11	4

13.3 Please describe any other economic development impacts (either positive or negative) that could result from the proposed project, such as creating property tax revenues or purchasing capital equipment, materials or services for New England businesses. Please provide the location(s) where these economic development benefits are expected to occur.

County Line Project- The total estimated economic impact for a project of this scale is \$2.5 million/MW or \$1.6 billion⁹. Approximately \$600 million of this total is for wind turbines sourced nationally & internationally depending on the turbine supplier. The balance would be distributed throughout northern New England. The project would involve approximately 650 vendors, including 400 from Maine, 175 from other New England States, and the remaining 75 from other regions of the US.

Community Benefit Agreements

Maine law requires that wind energy projects offer a minimum of \$4,000 per turbine per year in community benefits to Maine communities hosting wind projects. NRG projects typically include

⁹ Estimate provided by Reed & Reed on July 20, 2017

13. Contribution to Employment and Economic Development and Other Direct and Indirect Benefits

community benefits packages that exceed the statutory requirement and NRG expects to do the same with County Line Wind. **Section 7.4** outlines the plan for community benefits.

Property Tax Revenue

Property taxes for wind projects in Maine have historically varied widely based on project size and location. After reviewing a number of comparable projects¹⁰, our estimate is that the County Line Wind Project would contribute between \$3-3.5 million/year in property taxes.

Supply Chain

Reed & Reed estimates that 84% of their supply and service chain value is contracted to New England based businesses. This means the Project will create a \$267 million supply chain opportunity for New England businesses.

Ratepayer Benefits

Ratepayer benefits accrue for customers of the EDCs, as well as ratepayers throughout ISO-NE. Direct savings for the ratepayers of the EDCs result from the difference between the proposed contract price and the expected future market value of energy and RECs. Additional saving for ratepayers in all of New England result from County Line Wind's energy displacing more expensive resources in the wholesale energy markets.

Using 3rd party price curves for energy (NEMA-Boston) and RECs (MA Class I), County Line is expected to deliver more than \$1.1 billion in ratepayer savings over the life of the contract, looking at energy and RECs alone. Including the cost of delivery on the MPX line, that number is still almost \$500 million. On an NPV basis, these savings figures are roughly \$500 million and \$175 million respectively. The project is priced, including RECs and transmission, to deliver material savings in Year 1, and every year throughout the project. A full ratepayer analysis is provided in **CONFIDENTIAL CL Attachment 13.3.i**.

MPX Project –

Economic Development Benefits:

The MPX Project will be one of the largest developments of new transmission in New England with a capital investment of [REDACTED]. New transmission and renewable energy development will drive economic growth for the Commonwealth and region. The new infrastructure project will provide a foundation for enabling the regions' growth in renewable energy investment unlocking resources that have historically been stranded. Investment in transmission is essential to distribute renewable energy to the ratepayers in Massachusetts and throughout New England helping to balance energy demand with a diversified power supply.

Property Tax Revenue:

¹⁰ For example, Kibby Wind was assessed at \$400k/yr for a \$116 million CapEx, or 0.35%; Source: <https://www1.maine.gov/energy/pdf/Binder1.pdf>

13. Contribution to Employment and Economic Development and Other Direct and Indirect Benefits

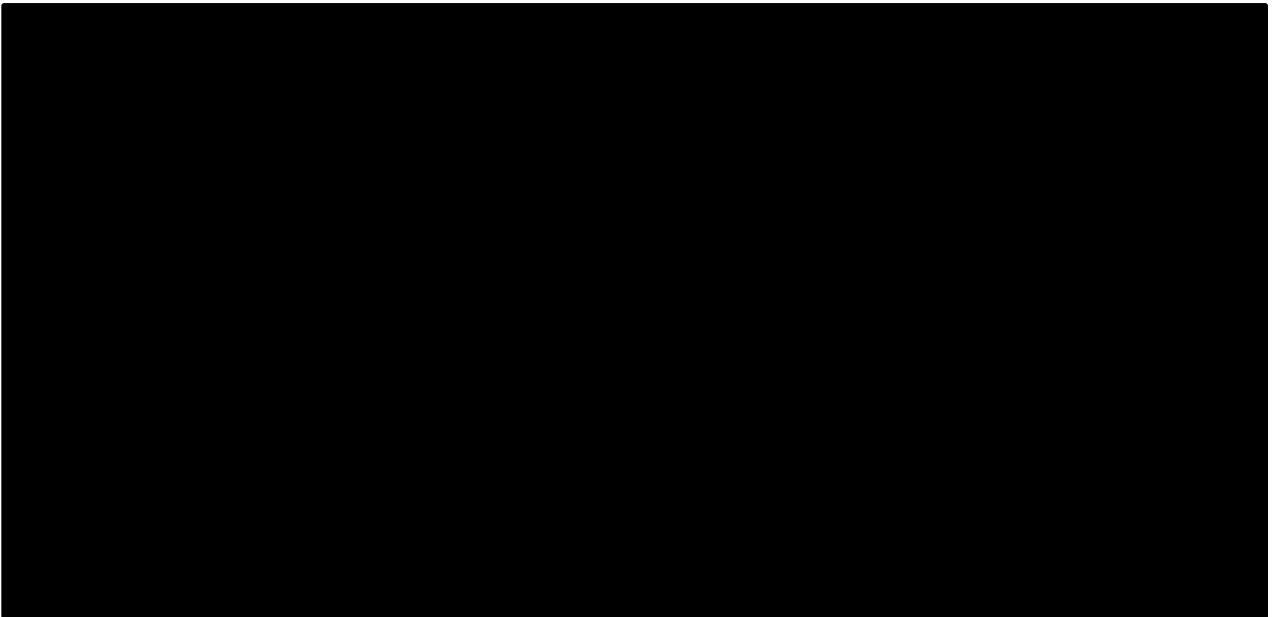
Property Taxes over the 20-year period of the PPA will be significant and be spread throughout municipalities in Maine, including the converter station and along the 100+ mile cable route and in Boston for the converter station. [REDACTED]

[REDACTED]

[REDACTED]

Supply Chain:

To the extent feasible, the MPX Project OEMs and EPCs will be subcontracting with local Maine and MA companies; this will be especially applicable to Project Construction and Equipment Installation. The following chart represents the magnitude of the MPX Project Capital Equipment, Project Construction and Equipment Installation expenditures, a portion of which will provide direct and indirect benefits to Maine, MA and other New England subcontractors and suppliers.



Electric Customer Benefits:

The MPX Project provides direct delivery transmission infrastructure to Boston Area Ratepayers for NRG renewable energy resources. In addition, the MPX has excess capacity to allow additional energy resources to contract for direct delivery to Boston Area Ratepayers. The MPX Project transmission infrastructure benefits include:

- Access to lower cost generation resources
- Opening and expanding supply of energy

13. Contribution to Employment and Economic Development and Other Direct and Indirect Benefits

- Mitigating impact of weather and load events
- Reduction in the wholesale cost of electricity
- Increase in power system reliability and sustainability
- Reduction of emissions and air pollution
- Increased competition
- Increased employment
- Increased economic activity
- Increased tax revenue

13.4 To the extent not already specified elsewhere in your response, please address the factors listed in Section 2.2.2.9 and describe any benefits or impacts associated with the proposed project.

County Line Project-

Addressing Long-Term Energy and Climate Policy

As domestic and international policy increasingly focus on addressing climate change, in the US through the Clean Power Plan and globally through the Paris climate agreement, purchasing zero emission renewable energy reduces the long term risk of increasing compliance costs from more stringent regulation. While many states in New England are not expected to have challenges meeting the Clean Power Plan, to the extent that states exceed their obligations, they can trade credits with other states and earn additional revenue.

Contracting for fixed price renewable energy also insulates Massachusetts ratepayers from the volatility of fossil fuel prices in the region. This has been a significant concern for both ratepayers and regulators in the region, arguably driving the demand for this RFP. This project will deliver the benefits of contracted renewable energy directly to Boston, unconstrained by the transmission challenges faced by most of our competitors.

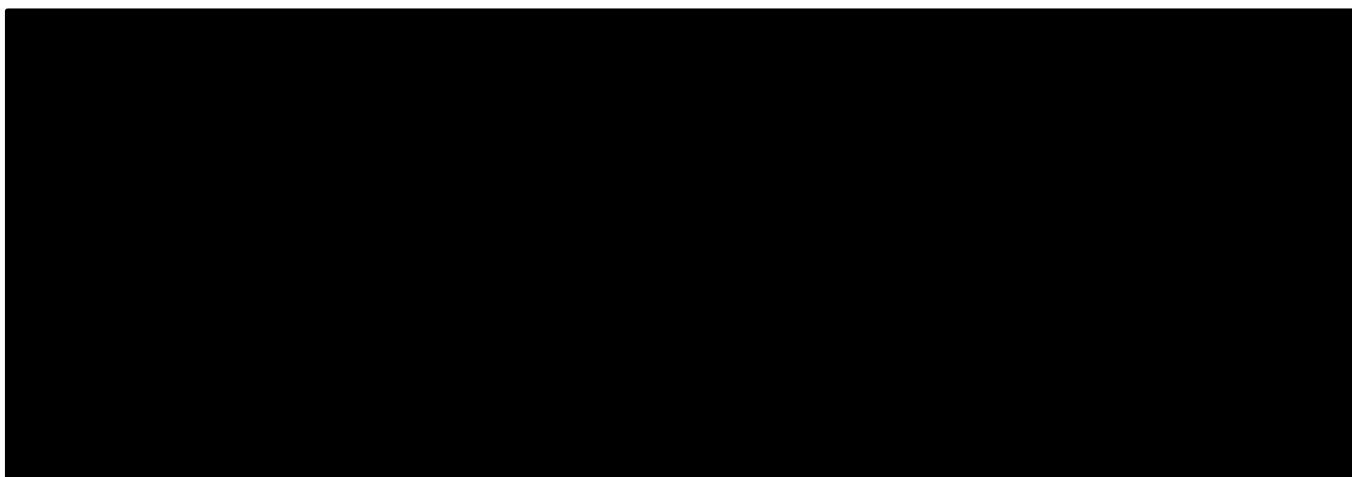
MPX Project - Contracting for fixed price renewable energy also insulates Massachusetts customers from the volatility of fossil fuel prices in the region. This has been a significant concern for both electric customers and regulators in the region, arguably driving the demand for this RFP. This project will deliver the benefits of contracted renewable energy directly to Boston, unconstrained by the transmission challenges faced by most of our competitors.

13.5 Describe how your project will

a. Contribute to reducing winter electricity price spikes in Massachusetts

County Line Project- As a winter-peaking resource, County Line Wind will deliver the majority of its generation during the months of November through March (See graph below). This generation profile aligns with the highest LMP periods in Massachusetts, providing the EDCs with a natural hedge against these price spikes. By reducing demand for electricity from conventional sources, and subsequently reducing the demand for natural gas, we would expect to see the marginal cost of generation drop accordingly, as well as a reduction in heating costs for Massachusetts ratepayers during these periods.

13. Contribution to Employment and Economic Development and Other Direct and Indirect Benefits



MPX Project – The MPX Project is capable of delivering additional energy resources 365/24/7. Any scheduled maintenance would not occur during peak periods.

b. Guarantee energy delivery in winter months.

County Line Project- As illustrated above, County Line wind is a winter-peaking generation source, with a strong, reliable wind resource throughout the winter months. This is true for all of our competitors in Northern New England; however, County Line has a unique advantage in its pairing with the Maine Power Express. As detailed below, deliverability directly to Boston avoids all of the curtailment risk faced by projects trying to wheel power through Maine and New Hampshire and into Massachusetts. The reliable winter wind resource of Northern New England only has value to Southern New England customers if the power can be reliably delivered – we believe County Line and MPX are uniquely positioned to achieve this.

MPX Project – The MPX Project is capable of delivering additional energy resources 365/24/7

13.6 If applicable, please demonstrate any benefits to low-income ratepayers in the Commonwealth, and the impact, if any, those benefits will have on the cost to the project.

County Line Project- The benefits described above will accrue for all ratepayers in Massachusetts, and particularly those in the NEMA Boston load zone. From our experience serving low-income and affordable housing customers under the Massachusetts SREC-II program, we know that the majority of load for these customers is in this region. This RFP is structured in a way that contracts generation directly with the utility, and thus distributes benefits to all ratepayers equally at no additional cost to the generator.

However, if NRG and MPX are selected in this RFP, allowing both parties to move forward with the construction of the projects, NRG would be in a unique position to offer creative products to low-income ratepayers in the future. For example, NRG could seek to develop additional generating capacity to route through MPX to Boston, and pair with NRG's retail power platform

13. Contribution to Employment and Economic Development and Other Direct and Indirect Benefits

to market low-cost competitive supply contracts to low-income ratepayers in the Commonwealth.

MPX Project - Low income ratepayers in the Commonwealth, especially in the Boston area, will be able to benefit from utilization of direct-connect domestic wind from Northern Maine to Boston, MA. The MPX Project benefits by having a large economically diverse consumer base at a large load center. These benefits include:

- Boston represents wide cross section of customers including low-income ratepayers
- Project allows access to renewable energy for all ratepayers
- Cost effective project that will deliver renewable energy to Boston electric users and low income consumers

14. Additional Information Required for Transmission Projects (And All Associated System Upgrades)

14.1 Transmission Project Information

i. Overall project description

The MPX Project is a 1,040MW (± 320 kV) High-Voltage Direct Current ("HVDC") transmission line proposal. An AC-to-DC Converter Station will be located in Southern Aroostook County Maine in close proximity to the County Line Project and the existing Searsport-Loring Right-of-Way ("SL-ROW"). The energy will be converted from AC to DC and delivered over two 5" HVDC transmission lines buried in the SL-ROW from Southern Aroostook County, 103 miles south to Searsport, ME. The underground cables will then be spliced with submarine cables which will be installed in the ocean, using various jet-plow and burial techniques, 200 miles south to Boston, MA. The submarine cables will make landfall at the east end of the Massport Conley Terminal where a DC-to-AC Converter Station will be located. The power will be converted from DC to AC and delivered 1.5 miles on 345kV AC Transmission Lines buried in a duct bank trench to the K Street Substation interconnection point. See **CONFIDENTIAL MPX Attachment 14.1.i**

ii. The operating voltage of the proposed project:

± 320 kV. The MPX Project will interconnect at the K Street substation at 345kV AC.

iii. The type of structures (such as steel towers or poles) that would be used for the proposed project

There are no towers or poles associated with the MPX Project. All cables will be buried underground and underwater.

iv. The length of the proposed transmission line and the type(s) of terrain and land ownership of the proposed ROW

■ *Overhead miles:*

Zero

■ *Underwater/underground miles:*

Underwater: ~200 miles. Underground: 103 miles in Maine; 1.5 miles in Massachusetts. 304.5 miles total.

■ *Terrain:*

A cleared and maintained ROW in mostly woodlands along a rural roadway. The SL-ROW is owned by the Loring Development Authority, an instrumentality of the State of Maine. The Sprague ROW is owned by the Sprague Corporation. The Savage ROW is owned by the Savage

14. Additional Information Required for Transmission Projects

Family. The Massport ROW is owned by Massport, an agency of the Commonwealth of Massachusetts.

- v. *The substation facilities (number of breakers, transformers, etc.) required at each terminal of the proposed project and information as to how the new facilities would interconnect to any existing facilities*

MPX Project -

Northern DC Converter Station: The Northern DC Converter will be a ± 320 kV ABB HVDC Light Voltage Source Converter station. This could interconnect with the MEPCO 345kV transmission line via a new Switchyard to convert the AC power to DC. One 345kV breaker will connect the wind generator and one spare breaker could be used to connect the potential 345kV new Substation which could connect to the MEPCO line.

Southern DC Converter Station: One 345kV breaker which will connect ABB HVDC converter station and its interconnection to the K Street 345 kV substation

K-Street Network Upgrade: As described in the System Impact Study conducted by ISO New England the MPX project interconnection will be responsible for constructing a new substation reconfiguration at K Street (Breaker and one half). This consists of 4 new 345kV breakers and relocated transmission feeders to mitigate breaker failure scenarios as well as facility loading concerns.

Northern Maine AC Substation: A potential 345kV interconnection with MEPCO line connecting the MEPCO line with the northern DC converter station

See **CONFIDENTIAL MPX Attachment 14.1.v.**

- vi. *The estimated costs of the proposed project broken out into separate categories as described below for transmission facilities and substation facilities in nominal year dollars.*
 - a. *For cost of service or modified cost of service proposals:*
 - 1. *Provide the capital cost estimate presented as a buildup of costs by category, such as environmental, engineering, civil works, materials, equipment, construction, construction management, physical and price contingencies, allowance for funds used during construction (AFUDC), and all other categories for which recovery under FERC would be sought. These categories are illustrative; aggregate costs into the categories most relevant to the development of the proposed project. All costs should be provided in nominal dollars.*

The MPX Project is not a Cost of Service project.

14. Additional Information Required for Transmission Projects

2. *For projects with transmission and substation components, separate the costs into two rows (e.g. use one row for substation construction and a second for transmission construction). Describe the detailed financial plan on a monthly basis during the construction period, e.g., for 3 years or as long as necessary. The plan should present the costs and financial outlays in each month of the construction period, and the corresponding sources of financing (equity contribution and debt drawdown), as in the following illustrative table. Data should include an estimate of the cost of both physical and price contingencies during the construction period. The financing plan should indicate the ability to finance the construction of the proposed project under base case and contingency scenarios.*

The MPX Project is not a Cost of Service project.

3. *Describe the proposed financing sources and instruments.*

The MPX Project is not a Cost of Service project

4. *Sources of funds for construction and working capital - include name of entity providing debt financing, loan amounts, interest rates, repayment period, grace period during construction; and equity provided by project sponsor.*

The MPX Project is not a Cost of Service project.

5. *Sources of funds for unexpected repairs or replacement construction during the operating period, e.g., replacement of tower. Note: the operating period is the applicant's estimate of the useful life or accounting life of the transmission project element(s).*

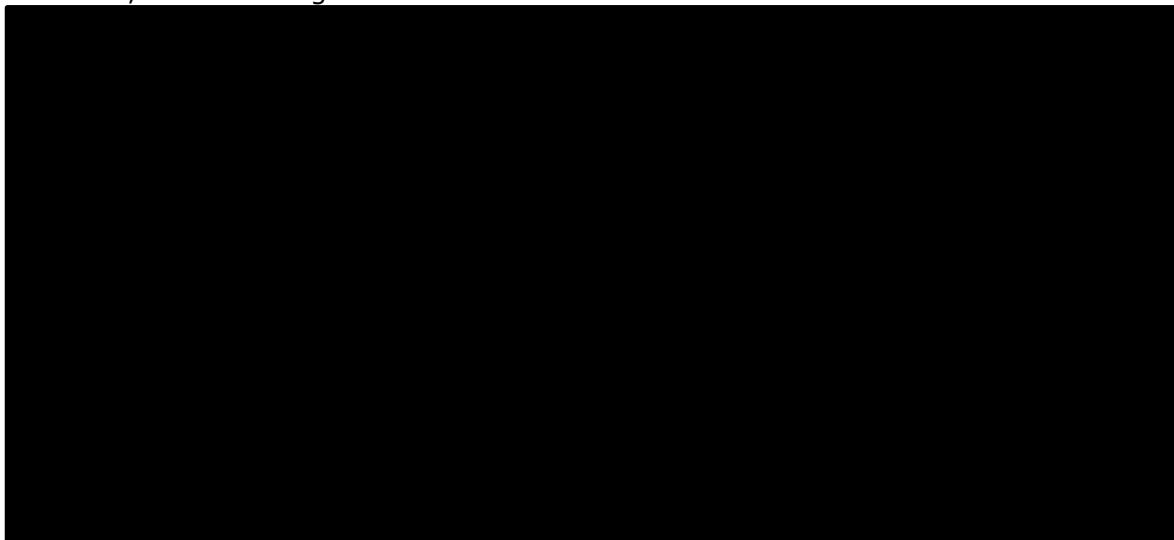
The MPX Project is not a Cost of Service project.

- b. *If the bidder is proposing fixed-rate pricing rather than cost-of-service or modified cost-of-service pricing, provide sufficient information and assessment to show that the proposed project, including any necessary transmission network upgrades, is financially viable. In this regard, provide capital cost estimates and operation and maintenance cost estimates and the basis for your estimates, including the extent to which estimates are based on vendor contracts or vendor quotes, your experience in the development, construction and/or operation of similar projects, your approach regarding contingency and risk management, and your proposed financing plan. All costs should be provided in nominal dollars, although inflation and cost escalation estimates should be provided. Please describe in detail the due diligence you have conducted in developing your pricing and tariff proposal.*

14. Additional Information Required for Transmission Projects

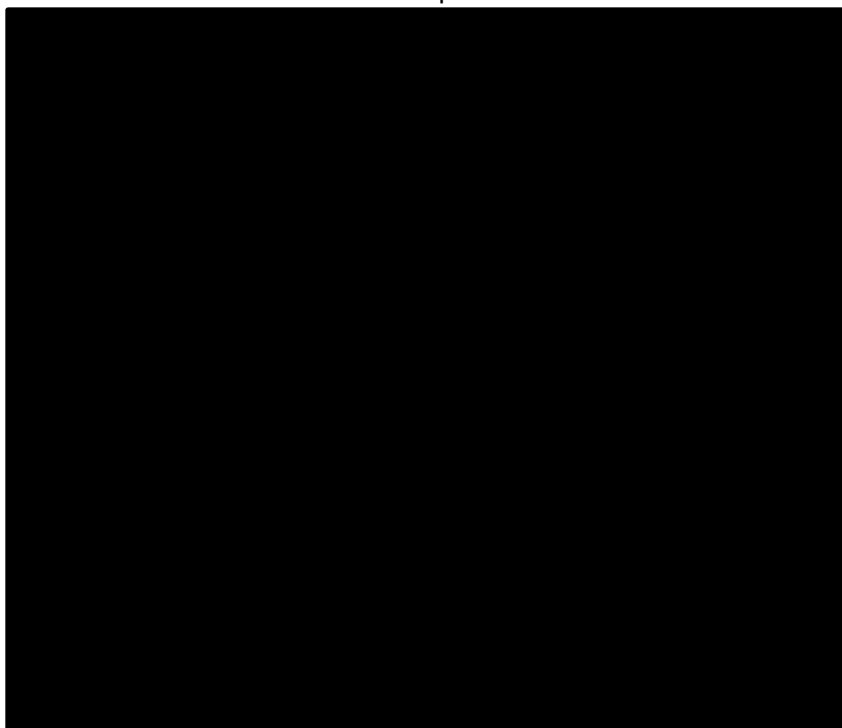
Capital cost estimate:

The MPX Project is estimated to have a total cost of approximately [REDACTED] (see table below). Kiewit, ABB and CET have provided a preliminary estimate of the MPX Project construction costs. The total MPX Project cost is inclusive of all development, engineering and construction, and financing costs.

A large rectangular area of the document is completely redacted with a solid black box, obscuring the table content.

Operation and maintenance cost estimate:

Operation and maintenance cost are estimated [REDACTED]
[REDACTED] The O&M budget is based on estimate provided by ABB/Con Edison, and cable manufacturers. The table below represents 2018 values.

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14. Additional Information Required for Transmission Projects

Contingency and risk management

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

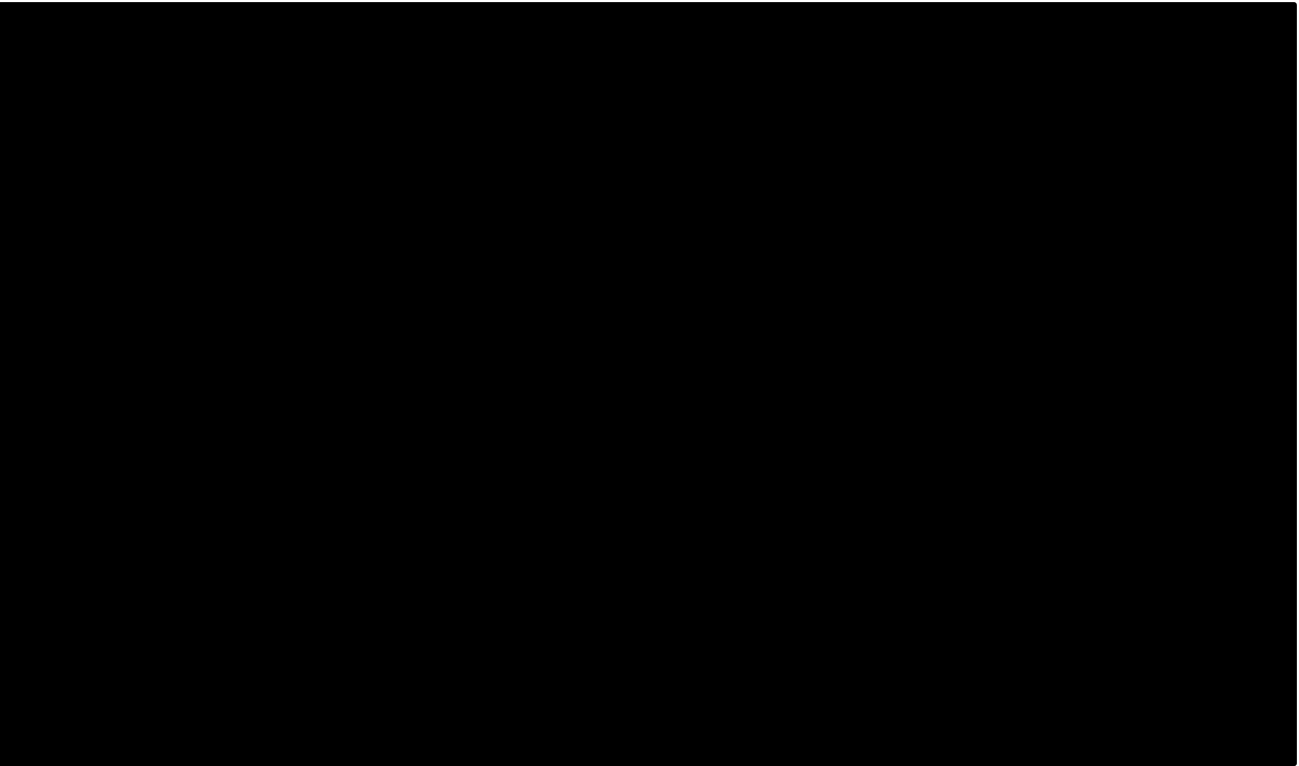
14. Additional Information Required for Transmission Projects

[Redacted content]

- vii. *Provide a proposed schedule for project development through release for operation that includes key critical path items, such as:*
- a. Develop contracts for project work*
 - b. Completion of studies and receipt of approvals needed for the interconnection*
 - c. Permitting; R/W and land acquisition*
 - d. Engineering and design*
 - e. Material and equipment procurement, including identification of long lead time equipment*
 - f. Facility construction*
 - g. Agreements (interconnection, operating, scheduling, etc.) with other entities*
 - h. Pre-operations testing*
 - i. Project in-service date*
 - j. Other items identified by the bidder*

14. Additional Information Required for Transmission Projects

MPX Project – See chart below for a schedule responsive to Section 14.1.vii. For detailed schedules see **CONFIDENTIAL MPX Attachment 14.1.vii.**



viii. *Bidder must indicate whether it proposes to recover abandonment costs for its transmission project from the Distribution Companies, as described in Section 2.2.2.6.2 of this RFP. If so, Bidder must acknowledge that recovery of any such abandonment costs shall be in accordance with FERC rules and policies, and also acknowledge that in no event will a Bidder seek to recover abandonment costs if the abandonment was caused directly or indirectly by some act or failure to act of the Bidder. Bidder must further affirmatively commit not to seek from FERC or any other agency or authority any treatment of abandonment costs inconsistent with the provisions of Section 2.2.2.6.2 of the RFP. To the extent the Bidder proposes to recover abandonment costs, such proposal should be further described as set forth in Appendix C-2 of this RFP.*

MPX Project - MPX proposes to recover abandonment costs for its transmission project. MPX acknowledges that recovery of any such costs shall be in accordance with FERC rules and practices and would be limited to prudently incurred abandonment costs beyond the control of MPX. MPX further affirmatively commits not to seek from FERC or any other agency or authority any treatment of abandonment costs inconsistent with the provisions of Section 2.2.2.6.2. of the RFP.

14.2 The proposed payment required for the transmission project and all system upgrades

- i. *All proposals must include significant cost containment as stated in the RFP.*

Noted. See cost containment information in section 14.2.viii.

- ii. *List all situations which may change the proposed payments by consumers during the contract term.*

MPX Project - As described in 14.2.viii, MPX expects to mitigate risk of increased payments by consumers to the maximum extent possible through fixed price contracting arrangements. Items that cannot be fixed via contract, such as currency and metal prices, will be tied to indexes. Certain provisions, including Unforeseeable Costs may lead to increased cost to the EDCs under the transmission service agreement. As defined in the attached TSA Term Sheet, Unforeseeable Costs include, but are not limited to:

- Associated material modifications to the routing or scope of work of the Transmission Facility that result from a governmental order, negotiations or settlement agreements within the transmission siting process, or are imposed or required by any other governmental agency or ISO NE;
- Changes in applicable laws and regulations; or
- Orders of courts or action or inaction by governmental agencies or ISO-NE.

See **CONFIDENTIAL MPX Attachment 15**.

- iii. *Identify any limits placed upon the bidder's post-contract term rates according to current FERC rules.*

MPX Project - As discussed in Section 5.20, MPX has been granted preliminary approval for negotiated rate authority related to transmission tariffs. This negotiated authority is expected to survive post contract term and therefore, we do not expect there to be any limits on the post-contract term rates. See **CONFIDENTIAL MPX Attachment 14.2.iii**

- iv. *Identify all other project revenues which may be received by the bidder during the contract term which would not reduce rates paid by consumers.*

MPX Project - MPX does not expect to receive any other revenues during the contract term which will not reduce rates paid by consumers.

- v. *If the proposed payments may change during the contract term or the proposal is based on cost of service, the bidder must provide the method that transmission owner shall use to determine the payment for the Transmission Project under the transmission Rate Schedule or Tariff and Service Agreement to be filed with FERC. If the proposed*

14. Additional Information Required for Transmission Projects

payment is a formula rate, the Eligible Bidder must also provide the formula and its proposed inputs that the transmission owner will file with FERC.

MPX Project – The MPX Project is not a Cost of Service project. The proposed payments under the Transmission Service Agreement to be filed with FERC are fixed based on a 2% annual escalation. See **CONFIDENTIAL MPX Attachment 15**.

- vi. If the proposed payment is based on the Transmission Project's cost of service and may change during the contract term based on changes in the cost of service, a full revenue requirements model must be included and submitted as a working Excel spreadsheet with the formulas intact.*
 - a. Provide the annual revenue requirement forecasts for the project – including assumptions. Provide a draft version of the revenue requirement calculation in a format that is similar to what would be included in the Rate Schedule or Tariff and Service Agreement application to FERC, indicating the forecast revenue requirement amounts and all assumptions used in the calculations. This should include but not be limited to the assumptions regarding rate of return, depreciation life, split between debt and capital, AFUDC and weighted cost of capital, and a detailed estimate of the anticipated average annual operating and maintenance cost. Provide the information requested in Section 14.1.a of the Bidder Response Package.*

The MPX Project is not a Cost of Service project.

- vii. If the pricing proposed is based on the cost of service, detail all cost containment commitments. Examples of such commitments include fixed price components, cost overrun restrictions, or other cost bandwidth provisions that are proposed to limit ratepayer risk must be clearly defined.*

The MPX Project is not a Cost of Service project.

- viii. Please include full and complete descriptions of all cost containment measures that you propose to be included in your pricing. Additionally provide any supporting documentation for any savings or methods of savings including cost caps on any portion of your project. Please include working excel spreadsheets to more fully explain how your cost containment measures should work. Please provide details and notes that describe the nexus between the cost containment provisions in your proposal and those supporting documents and spreadsheets. Please provide examples about how any cost containment measures you are proposing would work.*

MPX Project - MPX is proposing to develop, construct and operate its transmission project with a fixed price, rather than under a cost-of-service model, as detailed in the attached TSA Term Sheet in Section 15. MPX plans to contractually fix as much of the project budget as possible,

14. Additional Information Required for Transmission Projects

thereby mitigating the cost exposure for EDC customers. Prior to the execution of RFP-related contracts (PPA and TSA) with the MA EDCs, the MPX Project will enter into fixed-price, turn-key contracts with the EPC and major equipment suppliers. This will fix the price of the major cost components of the MPX Project (the cable, HVDC converter stations, and construction) and protect MA ratepayers from potential cost overruns. We further expect to finance the project with a market-standard project financing structure which will fix the cost of debt financing and will fully fund the proposed project cost and schedule

The MPX Project has been developed to optimize the risk profiles for equipment, construction, operations, and financing. The MPX Project construction plan and budget have been developed in cooperation with a consortium of two leading engineering and construction firms: ABB and Kiewit. These two firms have actively participated in the preliminary project design and cost estimation in support of this bid and have identified risks, removing them where possible and quantifying them when they cannot be avoided. Preliminary engineering has been completed and contingency dollars have been placed against risk areas to mitigate the impact of identified risks. To reduce the potential impact of unexpected cost overruns, the MPX Project will employ a comprehensive insurance program for construction delay, business interruption, casualty, and other critical areas. This strategy allows MPX to further limit the amount of contingency that will be incorporated into EPC and vendor contracts. At the time of contract execution, other manageable risks including commodity (metal), foreign exchange and interest rates, will be fixed to further mitigate potential overruns. MPX will seek to align contract terms between the PPA and the TSA with regard to exogenous or unforeseeable costs.

Con Edison operates one of the world's largest and most complicated energy delivery systems of electricity, gas, and steam, providing energy for the almost 10 million people who live in New York City and Westchester County. Most of our distribution networks are based on second contingency design which provides exceptionally reliable service to the most vibrant region of the country. Con Edison has demonstrated success in project management by successfully constructing large-scale transmission projects, including underground, overhead, and subsea transmission lines. Con Edison spent \$5.2 billion in capital in 2016 and \$3.4 billion in 2015. These capital expenditures demonstrate both Con Edison's financial strength and capacity, and also its purchasing power. Due to its long-standing relationships with leading contractors and equipment manufacturers, Con Edison has the ability to negotiate favorable prices and terms from contract counterparties for the MPX Project.

Significant work has been completed to date to accurately understand project costs and associated risks. The Right of Way has been field walked in key areas, as have both converter station sites. The MPX Project has secured equipment and construction cost estimates from Kiewit, ABB, and three cable providers. These estimates were reviewed in detail to determine their reasonableness, as well as any potentials for cost overruns. The transmission price included in this bid reflects the prices provided by contractors/vendors with critical contingency built in. All required permitting for the project, along with associated costs, has been identified. The MPX Project has conducted meetings with all key permitting agencies. Throughout the evaluation period, MPX will be continuously refining all cost estimates.

- ix. To the extent that you are proposing different interconnection scenarios that affect cost please include full and complete cost information on each scenario. Please describe all interconnection and transmission upgrade costs required to interconnect at the Capacity*

14. Additional Information Required for Transmission Projects

Capability Interconnection Standard and to ensure full dispatch, including transmission upgrades that may need to occur beyond the point of interconnection.

MPX Project - MPX is not proposing different interconnection scenarios. Interconnection and transmission upgrade costs are being determined through the ISO-NE System Impact Study process, which is currently underway. MPX received a preliminary cost estimate from ISO-NE and has factored this cost into the pricing offered. See **CONFIDENTIAL MPX Attachment 14.2.ix**.

- x. *Please describe the coordination of the availability of the Clean Energy Generation and any associated transmission or distribution facilities. All proposals must include a project schedule, and proposals including a combination of transmission and Clean Energy Generation should propose complete critical path schedules, for both elements of the project, from the notice of selection for contract consideration to the start of commercial operations (the "Baseline Schedule"). Please describe all aspects of your proposal that protect ratepayers from risks associated with payments for transmission costs when any associated expected Clean Energy Generation, as proposed by the bidder, is absent, reduced, or curtailed as compared to the Baseline Schedule.*

MPX Project – See **CONFIDENTIAL MPX Attachment 14.2.x**.

- xi. *Please describe your approach to avoid line losses.*

MPX Project - The fundamental approach to avoiding line losses is the construction of a new dedicated transmission line to deliver the stranded Maine wind resources directly to Boston. Equally as important, is the selection of Direct Current, as opposed to Alternating Current, transmission technology which has significantly less line losses. MPX expects less than 4% line losses for energy delivered over the 300+ mile line.

14.3 The schedule of the payments defined in 14.2 above including when the payments will commence, how often payments will be required and the length of time over which payments will be required. In no event may payments commence before the Transmission Project is placed in service.

MPX Project – Refer to the Draft TSA in Section 15.

14.4 The design life of the project

MPX Project – The design life of the MPX Project is 40+ years.

14.5 A description of the reliability benefits of the proposed Transmission Project and its impact on existing transmission constraints.

MPX Project – As an HVDC line interconnecting directly into K Street Substation in the city of Boston, The MPX Project bypasses the major transmission constraints in both Massachusetts

and New England as a whole. Wind generated in Maine interconnecting to the AC system and imports from New Brunswick may be limited by constraints at the Orrington-South and Surowiec-South interfaces in Maine and the North-South interface along the northern Massachusetts border. The MPX Project is not subject to these constraints, and power flowing over the line into Boston will never be limited due to any constraints on the ISO New England ("ISO-NE") transmission system. Interconnecting the MPX Project at the K Street Substation in Boston will require upgrades to the current configuration of the substation, thereby enhancing reliability at K Street.

As an HVDC transmission line, the MPX Project can provide additional reliability benefits to ISO-NE:

- The MPX Project's Voltage-Sourced converters ("VSCs") can be controlled to produce and absorb reactive power.
- The VSCs can also provide an ideal standby facility for black start of the interconnected AC system, if necessary.
- HVDC technology generates significantly less fault current due to electric faults than AC systems; it also isolates any fault currents from the rest of the transmission system, thereby improving reliability.

Although not required for this proposal, MPX will propose the construction of a 345kV substation to interconnect to the Maine Electric Power Company ("MEPCO") transmission line 396 between the New Brunswick border and Orrington, ME. The MPX Project would interconnect with the MEPCO line north of the Orrington – South interface in Maine, which is currently constrained. This northern connection would allow MPX to simultaneously bring increased hydroelectric and other clean energy imports from Northern Maine and New Brunswick while relieving congestion further south in the Maine system.

ISO-NE commissioned ABB to create a System Impact Study ("SIS") evaluating the impact of the proposed MPX Project on the reliability of the New England System. See **CONFIDENTIAL MPX Attachments 3.3 and 14.2.ix**. For the SIS, the MPX Project was defined as a 1,000MW, ± 320 kV 315 mile HVDC transmission line originating in Haynesville, ME¹¹ and terminating at K Street in Boston. The findings of the SIS are very encouraging. Some of the outcome of the study is stated below.

- Steady state analysis was performed on different load conditions to evaluate a broad range of potential operating conditions; the study concluded there were no negative system impact or voltage related issues due to the MPX Project.
- At the locations closest to the MPX Project Interconnection (K. Street and Stoughton), the breaker duties were found to be well within their respective ratings, with the MPX Project causing minimal incremental impact.
- As modeled, the MPX Project demonstrated and adhered to ISO-NE's Voltage and Reactive Power Control requirements, as well as the ISO's Frequency Response requirement.

¹¹ Since the Elective Transmission Upgrade was submitted, the MPX Project has relocated to a township in southern Aroostook County. This was not considered a material change by ISO-NE and did not impact the MPX Project Queue position.

14. Additional Information Required for Transmission Projects

- A screening of the short-circuit strength available at the MPX Project's point of interconnection was undertaken in order to ensure that the MPX Project would remain operable under operating conditions which substantially weaken the transmission system. Several combinations of facility outage conditions were simulated and no concerns were found in the operation even at the weakest possible network condition.
- A comparison between the pre- and post-project voltages in Maine (Cooper's Mills and Orrington 345kV) indicated no adverse impact due to the MPX Project. In fact, the plots identified about 3% improvement in the transient voltage at those buses.

15. Exceptions to Form PPA and/or Variations from the Proposed Tariff Requirements

Please attach an explanation of any exceptions to the form PPA set forth in Appendix C to this Notice, including any specific alternative provisions in a redline format to the Form PPA.

Transmission bids must contain a proposed tariff, rate schedule or transmission service agreement ("Transmission Agreement") that the Bidder proposes as the vehicle for recovery of its transmission costs from the Distribution Companies. In addition, all transmission bids must separately contain a detailed summary of the material provisions of the proposed Transmission Agreement. Such a summary should include, but not be limited to, a discussion of the key provisions set forth in Appendix C-3, as well as a cross-reference to the corresponding sections of the proposed Transmission Agreement where such provisions may be found.

Bidders are discouraged from proposing changes to the Form PPA and/or variations from the Proposed Tariff requirements.

County Line Project - A redline of the Form PPA (Appendix C-1 of the Notice) has been provided as **CONFIDENTIAL CL Attachment 15**.

MPX Project – A proposed Transmission Service Agreement is attached. See **CONFIDENTIAL MPX Attachment 15**.