

SECTION 83D
REQUEST FOR PROPOSAL
APPLICATION FORM

Longroad Energy – Three Corners Solar Project

Applicant Information

Applicant: Longroad Development Company, LLC

Address: 133 Federal St., Suite 1202, Boston, MA 02110

Contact: Adam Horwitz, VP Finance and Origination

Phone:

[REDACTED]

Email:

[REDACTED]

**Section 1 of Appendix B to the RFP:
Certification, Project and Pricing Data**

The Certification, Project and Pricing Data (“CPPD”) document is a Microsoft Excel workbook that is provided on the website at www.MACleanEnergy.com.

CPPD and Executed Bid Certification forms for the Project are provided by appendix.

Section 2 of Appendix B to the RFP: Executive Summary of the Proposal

The bidder is required to provide an executive summary of the project proposal that includes a complete description of the proposed generation and/or transmission bid, the proposed contract term and pricing schedule, and other factors the bidder deems to be important.

Longroad Development Company, LLC, (“Longroad” or the “Bidder”)¹ appreciates the opportunity to respond to the 2017 Section 83D Request for Proposals issued by the Commonwealth of Massachusetts and the Distribution Companies for New Clean Energy and Transmission Resources (the “RFP”).

Based in Boston, MA, **Longroad** is focused on the development, construction and operation of utility-scale wind and solar energy projects throughout the United States. Longroad was founded by the former executive team of First Wind Holdings, LLC (“First Wind”). While at First Wind and later at SunEdison (following its acquisition of First Wind), the core members of the Longroad team successfully developed and built over **33** utility-scale solar and wind energy projects totaling more than **3,300 MW** of installed generation capacity, including **664 MW** in ISO New England (“ISO-NE”)². Of the 664 MW of projects in ISO-NE, **333 MW** of utility-scale wind capacity was selected for power purchase agreements under Section 83 A (“83A Projects”). Additionally, the Longroad team developed **21 MW** of solar energy facilities sited in Massachusetts. All of the referenced projects in ISO-NE were successfully developed, constructed and operated by the Longroad team.

Exhibit 2.0 – Select Bidder Team Development Experience in New England

Project(s)	State	Size (MWac)	Technology	COD Year	Off-taker
Mars Hill	ME	42	Wind	2007	New Brunswick Power
Stetson I	ME	57	Wind	2009	Constellation Energy
Rollins	ME	60	Wind	2010	CMP, Bangor Hydro
Stetson II	ME	25.5	Wind	2010	Harvard University
Sheffield	VT	40	Wind	2011	BEC, VECO, WECO
Bull Hill	ME	34.5	Wind	2012	NSTAR (Eversource)
Millbury	MA	4	Solar	2013	SREC/Municipal net metering
Warren	MA	17	Solar	2013	SREC/Municipal net metering
Oakfield	ME	148	Wind	2015	Eversource, National Grid (Sec. 83A)
Bingham	ME	185	Wind	2016	Eversource, National Grid (Sec. 83A)
Hancock	ME	51	Wind	2016	MMWEC, Burlington Electric

¹ Longroad Development Company, LLC, is a subsidiary of Longroad Energy Holdings, LLC. Further information about Longroad’s ownership structure is provided in Section 5.

² 664 MW includes the 42 MW Mars Hill project; located in Northern Maine and operates within the Northern Maine Independent System Administrator, Inc.

Longroad has continued to invest in utility-scale development renewable energy pipeline in New England to help meet continued demand for cost-effective clean energy and enhanced electric reliability. In this proposal, Longroad is offering **Three Corners Solar** (the “Project”), a development-stage **122.5 MWac** solar energy facility located in [REDACTED] Maine.³

As described further in this proposal, the Project will meet the objectives of the Green Communities Act, an Act to Promote Energy Diversity, and the Global Warming Solutions Act (“GWSA”) by:

- Offering direct savings for Massachusetts ratepayers through competitive energy and REC pricing, and reducing volatility and price spikes in wholesale electricity markets through a long-term fixed-price contract structure;
- Making meaningful and timely contributions to GWSA goals by diversifying the New England energy mix and decreasing the region’s reliance on natural gas with a viable and zero carbon project;
- Adding 122.5 MWac of incremental generation and capacity to the ISO-NE region, thereby increasing supply reserve margins and strengthening system reliability;
- Mobilizing significant investment in New England-based supply chain and local communities;
- Reducing development and contract risk for the Commonwealth through Longroad’s proven track record and capabilities for project management and development execution.

These highlights, described in further detail throughout the proposal, demonstrate that Longroad has the development assets, industry expertise, financial resources, local experience and the established supply chain needed to help the Commonwealth capture the intended environmental, financial, and reliability benefits of this RFP.

Introduction to Three Corners Solar Project

The Three Corners Solar project is located in [REDACTED]. This area was selected for the suitability of the land characteristics, relative solar resource in Maine, and anticipated grid capacity.

The Longroad team has gained deep local knowledge and credibility in Maine throughout the development of hundreds of megawatts of wind energy projects. Due to Longroad’s experience and extensive relationships in the region, Three Corners Solar enjoys strong local support, and we are confident in our ability to permit, finance, build, and operate the Project to deliver cost-effective energy under the proposed terms of a PPA.

The Project will be comprised of numerous solar arrays comprised of 360+ watt modules, 2700 kVA inverters, ground mounted racking, associated collection systems, and a facility substation and step-up transformer. The Project will interconnect to ISO-NE via an approximately [REDACTED] territory.

³ In some Appendix and reference materials the Project may be referred to as [REDACTED]

Longroad's resource assessment indicates a Net Capacity Factor ("NCF") of [REDACTED] and annual production of [REDACTED]⁴ Further information about the solar resource is provided in Section 4.

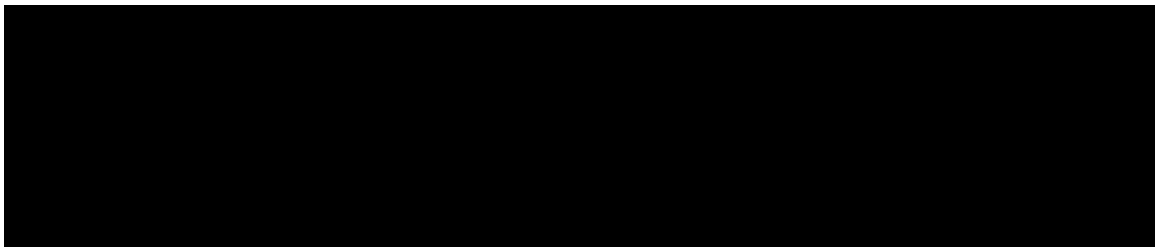
The following development factors and milestones demonstrate the Project's viability and alignment with the objectives of the RFP:

- **Solar Resource:** Longroad has analyzed the solar resource to confirm viability and cost-effectiveness of the facility, and has extensive project development experience in this region of Maine.
- **Site Control:** Three Corners Solar has Lease Option agreements in place for the Project site.
- **Permitting:** Environmental and permitting planning is underway; the Longroad team has successfully permitted eight renewable energy facilities in Maine.
- **Technical and Financial Ability:** Longroad has constructed, financed and operated solar energy projects comparable to Three Corners Solar in size and scope, and has operational experience with similar solar technology.
- **Interconnection status:** The Project holds a valid interconnection queue position in ISO-NE (QP670).

Pricing Summary

Longroad is offering the following pricing terms for the Project, consistent with the RFP requirements for minimum nameplate capacity, structure, associated environmental attributes, and contract tenor:

Exhibit 2.1 - Three Corners Solar Bid Summary



Project and Proposal Eligibility

The Project and this proposal conform to the following RFP Eligibility Requirements:

- Longroad is the owner of development rights to and assets of the Clean Energy Generation Project.
- The Project is not currently contracted through Section 83A or Net Metering.
- The Project intends to qualify as New Class I RPS Eligible Resources via Long Term Contract.
- The Project's proposed pricing structure is on a fixed \$/MWh basis, with separate prices for Clean Energy and REC products.
- Bidder's affiliations are disclosed in Section 5 of the proposal.

⁴ For NCF and production estimates, values are Year 1 AC.

- An eligible contract term of [REDACTED] has been proposed.
- The Project's nameplate capacity exceeds the minimum contract size of 20 MW.
- Bidder provides a commitment to interconnect to the PTF at the Capacity Capability Interconnection Standard.
- Project energy and environmental attributes will remain deliverable, without substitution or added costs, throughout the term of the proposed contract.
- In addition to this proposal document conforming to Appendix B of the RFP, Bidder has submitted:
 - CPPD and Appendix D Forms,
 - Appendix C-1, and
 - Other relevant appendix in order to deliver a complete proposal.
- Bid fees have been delivered according to the instructions and terms described in Section 1.10 of the RFP.

About Longroad

Longroad was founded by the former executive team of First Wind. In addition to the executive team, numerous other former First Wind senior leaders and development professionals are now a part of the Longroad team and directly involved in the development of the Project. For this reason, the experience, track record and assignment of certain development successes of First Wind are often used interchangeably with the experience and credentials of Longroad.

Longroad is principally funded by two New Zealand-based funds with over \$35 billion of combined assets under management. Longroad has the capital needed to complete development, fund security requirements and construct our portfolio of renewable energy projects. We also have strong financial partners and a proven track record of raising additional sources of equity and development capital.

Section 3 of Appendix B to the RFP: 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).

The Longroad team is the most experienced utility-scale wind energy developer and operator in New England. Among the team that has transitioned from First Wind to SunEdison to Longroad is the former leadership of First Wind's former Operations and Maintenance ("O&M") and Commercial Asset Management teams, with experience commissioning and management of over 2.5 GWs of renewable energy generation in multiple U.S. markets and Canada.

Operational parameters for Longroad projects are designed to maximize availability and performance. To the greatest extent possible, maintenance activities and outages are planned during low production periods, and economic incentives for our O&M service teams are structured to reflect this priority.

Solar project maintenance follows a schedule based on industry best practices and the requirements of the inverter and other major equipment manufacturers. Maintenance will be performed by Longroad's on-site O&M staff augmented by additional personnel as required to efficiently complete each service.

Once the Commercial Operation Date ("COD") has been achieved, the project has annual maintenance performed, unless a manufacturer's manual requires maintenance on a more frequent basis. A complete site-wide facility maintenance outage (grid disconnect) is not required for individual solar component maintenance; rather, routine maintenance results in a partial outage, in which the capacity de-rating is inverter nameplate (in kilowatts) multiplied by the number of inverters having maintenance done concurrently.

Balance of Plant ("BOP") infrastructure is defined as: the substation, collection system, 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 would be scheduled with the local grid operator, 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 requires 1-1.5 days of planned maintenance. This work will be scheduled and performed at the same time as substation maintenance.

The inverter pad transformers 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.

Maintenance Outage Requirements are described further in the context of the O&M plan in Section 9.

3.2) Operating Constraints - Specify all the expected operating constraints and operational 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.

The primary operating constraint of a solar project is the availability and irradiance of the solar resource. Factors affecting the Project's available solar resource – for example, seasonality, weather conditions, soiling, losses, etc. – are described at length in Section 4, and are also incorporated into the CPPD production profiles.

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

Three Corners Solar will provide reliability benefits by adding incremental energy and capacity to the ISO-NE region, thereby increasing supply reserve margins. The delivery profile aligns with summer peak demand events and Bidder commits to the winter guarantee as required by this RFP.

Longroad will make commercially reasonable efforts to qualify and, based on interconnection studies to date, anticipates clearing Three Corners Solar in the ISO-NE Forward Capacity Market. Longroad will submit a qualification application for an appropriate Forward Capacity Auction ("FCA") and if qualified Longroad intends to have Three Corners Solar participate in the FCA. Deliverability of the Project is described further in Section 6.

3.4) Moderation of System Peak Load - Describe how the proposal would contribute to moderating system peak load requirements and provide the following information:

- i. Estimated average output for each summer period (June- September) from 1:00 - 6:00pm
- ii. Estimated average output for each winter period (October-May) from 5:00 - 7:00 pm

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

Estimated average Project output during peak load periods is as follows:

- Estimated average output for each summer period (June-September) from 1:00 pm- 6:00 pm: [REDACTED]

- Estimated average output for each winter period (October-May) from 5:00 pm-7:00 pm: [REDACTED]

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.

- a) If in operation, when did the project achieve commercial operation**
- b) If in construction, when did construction commence and what are the projected dates for initial testing and commercial operation.**
- c) If the project is partly in one development stage and partly in another, please explain in detail the status of the project**

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.

Three Corners Solar is in the development stage, and is scheduled to achieve commercial operations in [REDACTED]

The Three Corners Solar permitting requirements are well understood, and the Longroad team's methodology learned from developing and successfully permitting 643 MW of renewable generation capacity in Maine will be applied to the Project. Longroad will continue to advance interconnection studies and complete natural resources studies in advance of submitting a permit application to the Maine Department of Environmental Protection ("MDEP").

Site control, permitting, engineering design, interconnection studies, host community support, financing commitments, supply chain agreements, and operational plans are scheduled in a manner to meet the Project Schedule (Section 10).

The long term, bundled PPA with the Distribution Companies is the critical instrument that will be used to support capital allocation, financing and construction of the Project.

Section 4 of Appendix B to the RFP: Energy Resource and Delivery Plan

4.1) Energy Resource Plan

For Eligible Facilities, the bidder is required to provide an energy resource or fuel supply plan for its proposed project, including supporting documentation. The fuel supply/energy resource profile information should be consistent with the type of technology/resource option proposed and the term proposed. The information requested is organized according to the type of project or energy resource. Bidders should respond to all information requests which are relevant to the bid in a timely manner.

Wind Energy Projects

- Provide a summary of all collected wind data for the proposed site. Identify when the data was collected and by whom.
- 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.
- 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 an 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 24 energy projection) at both P50 and P90 levels.
- 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.
- If your bid includes a delivery forecast which is substantially different than NREL data would suggest, please reconcile the differences.

N/A

Landfill Gas

N/A

Biomass

N/A

Solar

Provide an assessment of the available solar incidence or resource. Describe any trends in generation capability over time (i.e., annual decline rate of expected output).

Describe the methodology used to generate the projected generation and describe the in-house or consulting expertise used to arrive at the generation estimates.

Longroad's solar resource team has managed the resource analysis for the Project. The team is comprised of meteorologists and engineers with expertise in the latest solar industry modeling techniques and analysis. Longroad also employs in-house personnel dedicated to installing, monitoring, servicing, and decommissioning solar monitoring stations. This allows a greater degree of responsiveness to maintenance needs and also ensures Longroad's solar monitoring campaigns are consistently executed at a high standard. These teams have designed and executed solar monitoring campaigns, designed solar plant layouts, and produced solar resource and energy production assessments for many projects totaling more than 625 MW of installed solar project capacity.

Project Area

The Project is located in [REDACTED], approximately [REDACTED]. The site consists of over 600 acres of flat terrain, well suited for solar arrays. Exhibit 4.1-1 depicts the initial site plan and Exhibit 4.1-2 depicts the Project's location with respect to the Point of Interconnection ("POI").

Exhibit 4.1-1 – Project Site Plan

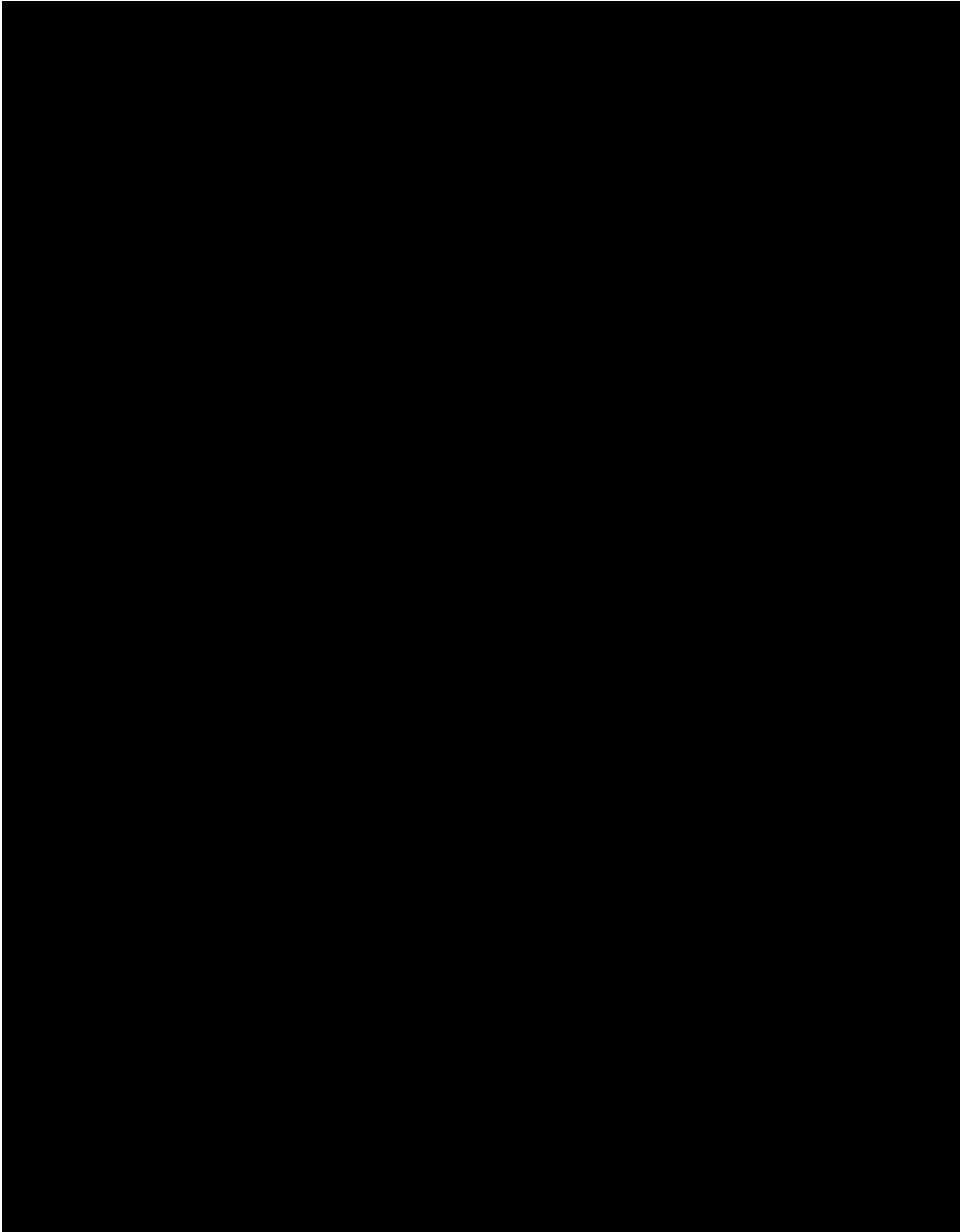
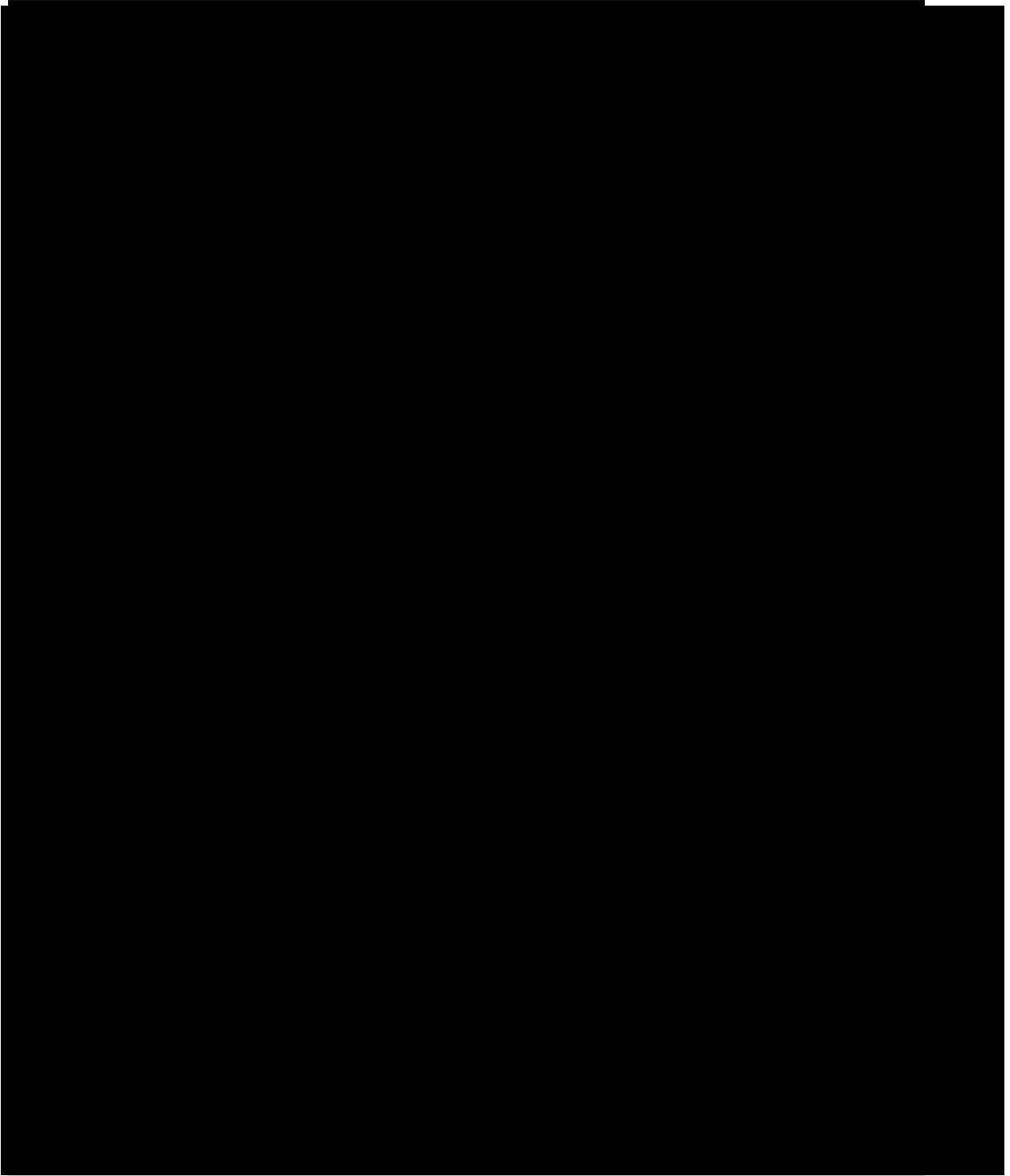


Exhibit 4.1-2 – Project Interconnection Route

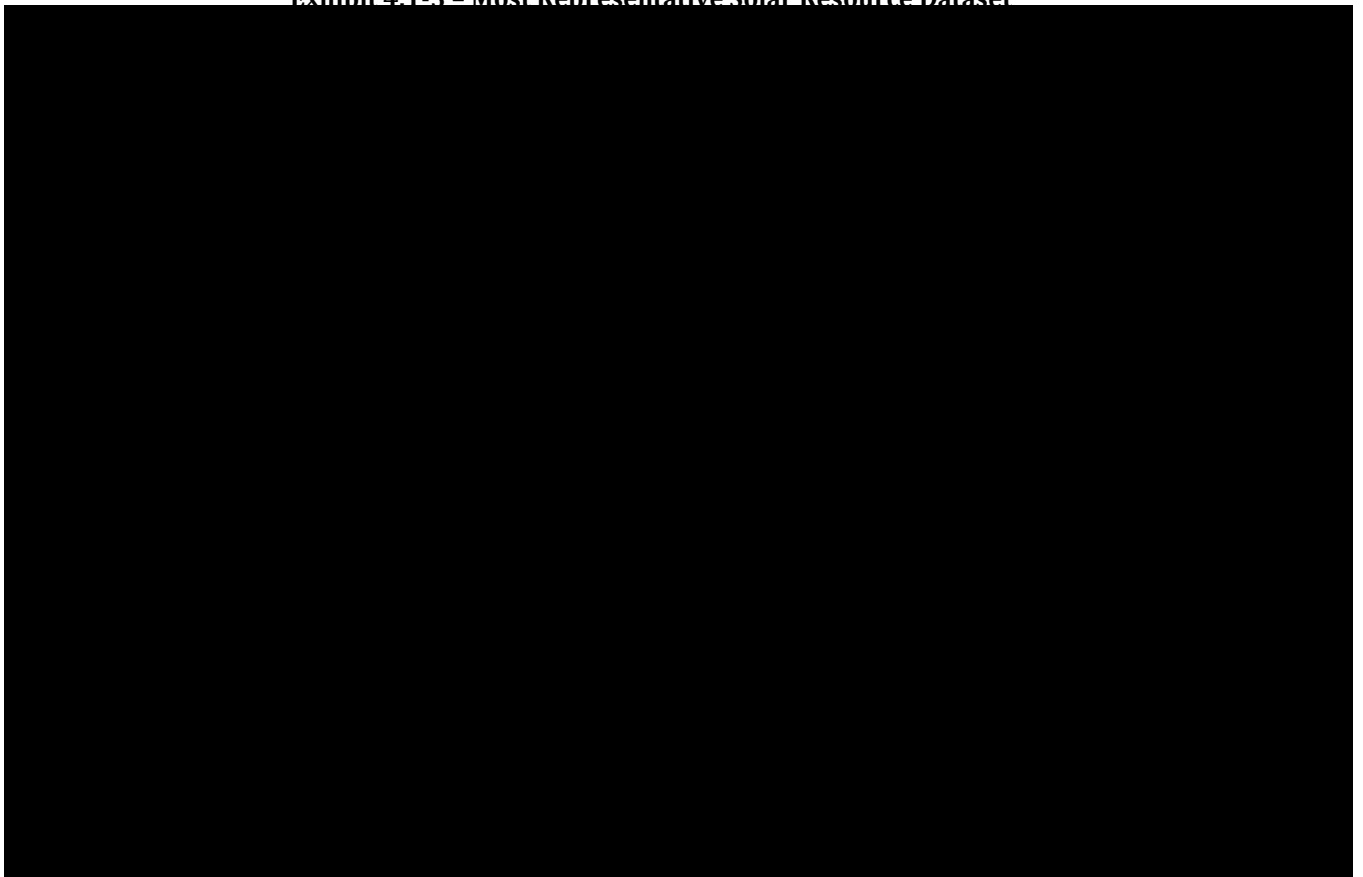


Solar Resource Assessment

Longroad assessed potentially applicable solar resource datasets for modeling the expected solar resource at the Project location. The candidate datasets considered were sourced from the National Solar Radiation Database (“NSRDB”) and CPR Solar Anywhere.

NSRDB Class I TMY3 data is often a good publicly available representation of solar resource, provided the station is proximal to the site. The nearest NSRDB Class I station was 40 miles east at Bangor International Airport. As such, the CPR Solar Anywhere dataset was chosen to represent the solar resource at the Project site due to the dataset’s proximity, as well as a long period of record to present and low uncertainty. The CPR Solar Anywhere Average Annual GHI is provided as Exhibit 4.1-3, and the GHI and modeled POA based are provided as Exhibit 4.1-4. Longroad intends to initiate a ground measurement campaign in the Fall of 2017 to correct the CPR data and to further reduce uncertainty.

Exhibit 4.1-3 – Most Representative Solar Resource Dataset



Solar Anywhere

SolarAnywhere is a web-based service provided by Clean Power Research (“CPR”) that provides estimates of solar irradiance for locations within the continental United States and Hawaii. SolarAnywhere uses images from the National Oceanic and Atmospheric Association GOES satellite to estimate solar resource on the surface of the earth. SolarAnywhere uses newer algorithms than were used when deriving the SUNY-Perez dataset. SolarAnywhere has hired Dr. Perez to implement updated algorithms for modeling solar resource by utilizing images taken by the satellite. When provided with ground based

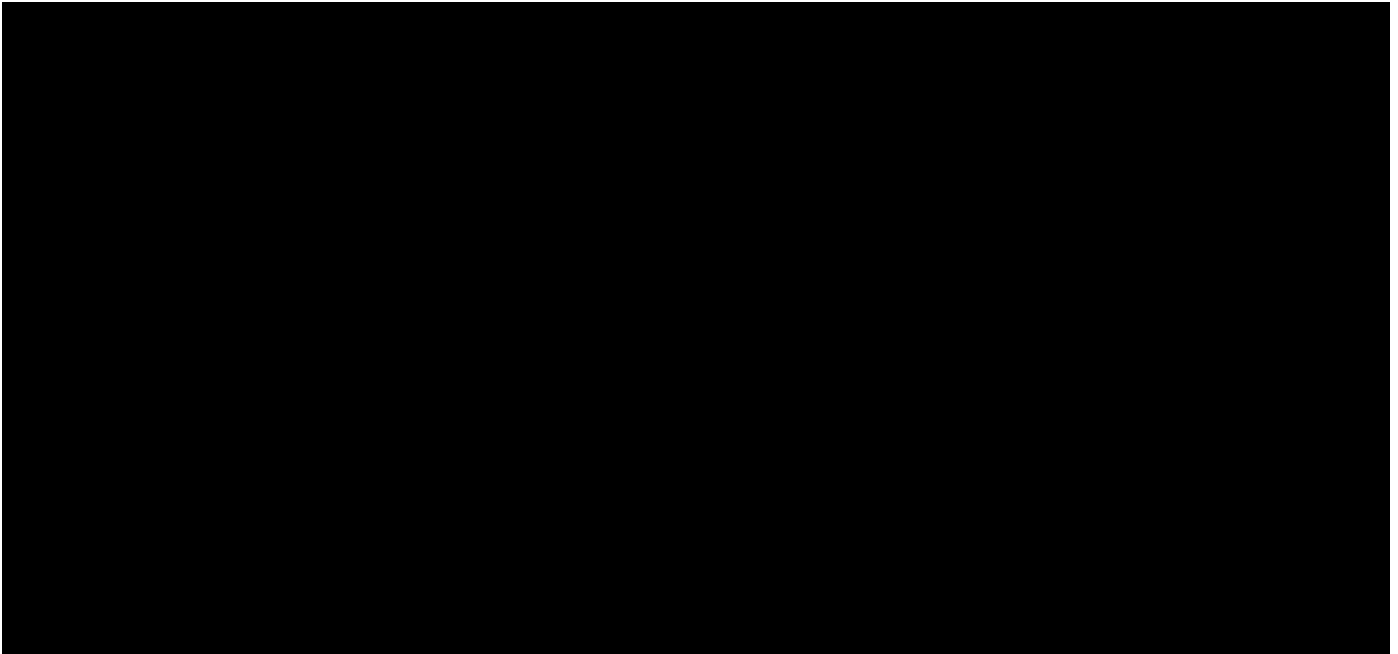
measurements, CPR uses MOS-correction to de-bias satellite data to better represent expected on-site solar resource. Data from CPR is not freely available.

Typical Site Weather Conditions

Publicly available weather databases were accessed to estimate the expected number of precipitation events and amount of precipitation; and in turn, estimate the expected amount of soiling loss on the photovoltaic modules from dust, dirt, and snow. The nearest long-term precipitation and snow data were from Farmington, Maine, [REDACTED]. The source of the data was NOAA National Center for Environmental Information ("NCEI").

Exhibit 4.1-5 lists the historic average monthly weather conditions reported for the weather station that was selected to be most representative of the expected weather conditions at the Project location. The location typically has mild summers with moderate rain, while winters are typically cold with snow.

Exhibit 4.1-5 - Temperature and Precipitation at Farmington, Maine



Performance Modeling Inputs

The Project was sized and optimized to efficiently deliver low-cost energy within the specifications of this RFP. Longroad used PVsyst version 6.60 to estimate the energy that is expected to be produced by the Project. PVsyst is an industry-accepted performance modeling software application for solar PV installations; it was developed by the University of Geneva in Switzerland and is currently maintained by PVsyst. The PVsyst application contains a library of the performance characteristics of PV modules and inverters that encompasses most of the types of equipment commonly used in solar PV projects.

Exhibit 4.1-6 and 4.1-7 summarize the major equipment and principal system design parameters that were used to construct a performance model of the Project (further information about proposed technology is provided in Section 8).

Exhibit 4.1-6 - Major Equipment and Principal System Design Parameters

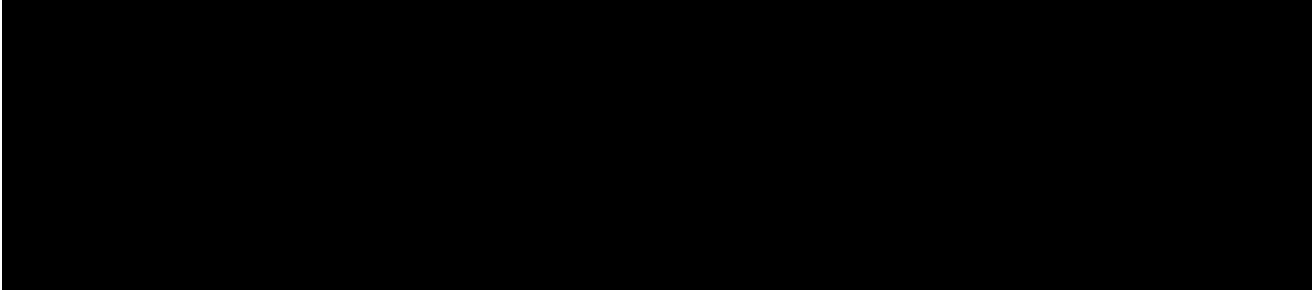
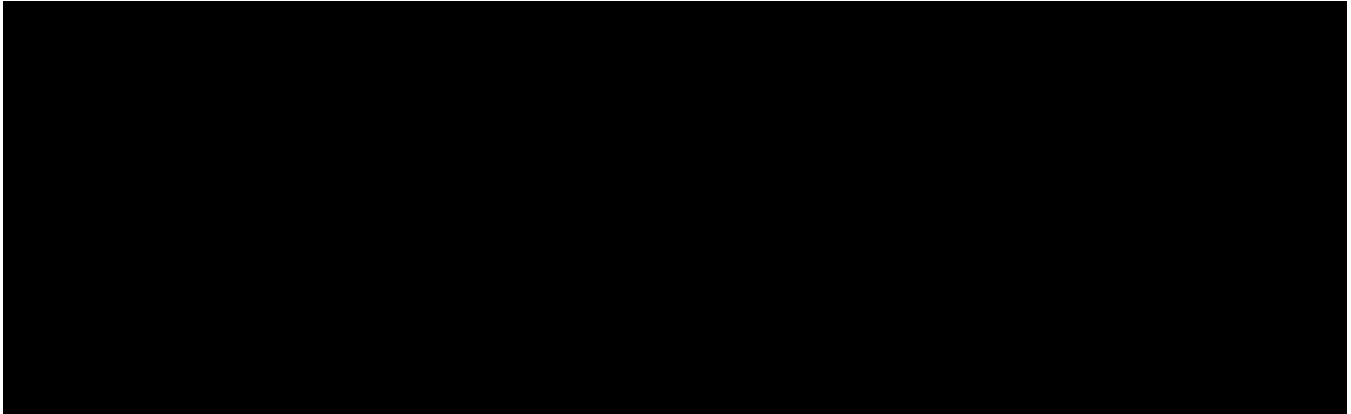


Exhibit 4.1-7 - Additional Design Details



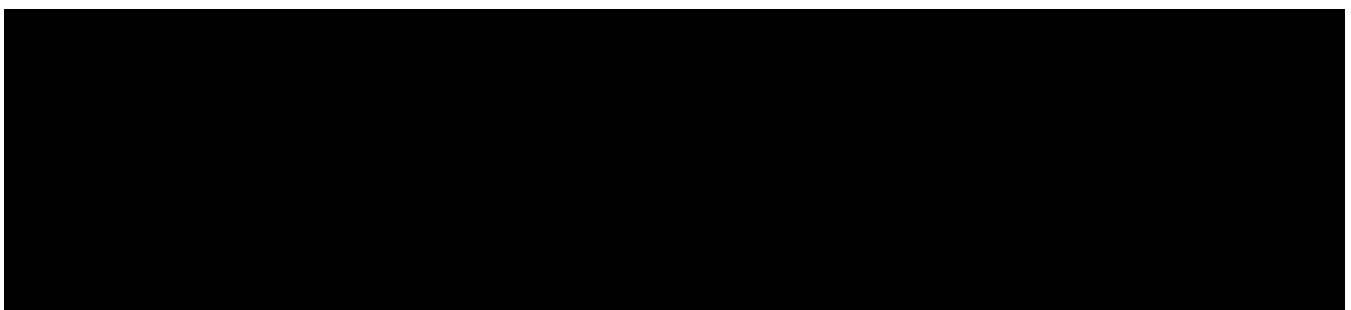
Module and Inverter Performance Models

To model the performance of the modules and inverters, Longroad used the module PAN file and inverter OND file provided by the manufacturers and information on the manufacturer's datasheets.

Loss and Gain Factors

In the early stages of development, loss and gain factors are based on known specifications of the equipment and the design engineer's best professional judgment. As the Project design progresses, assumptions are refined using more robust engineering calculations. Exhibit 4.1-8 and Exhibit 4.1-9 summarize the loss and gain inputs used in the performance model.

Exhibit 4.1-8 - Loss and gain factors



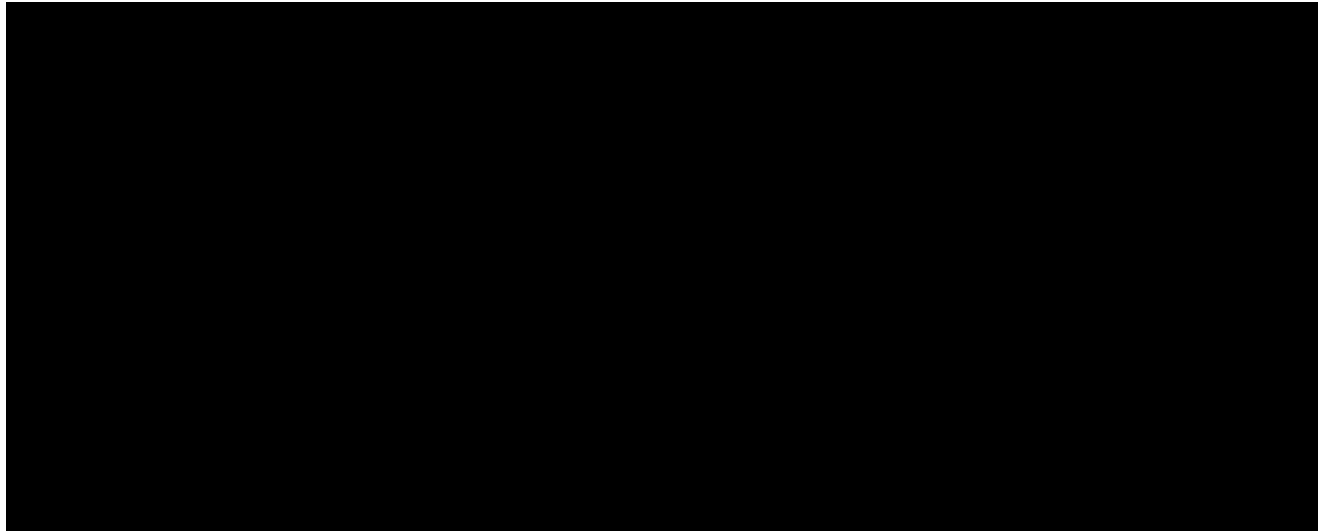
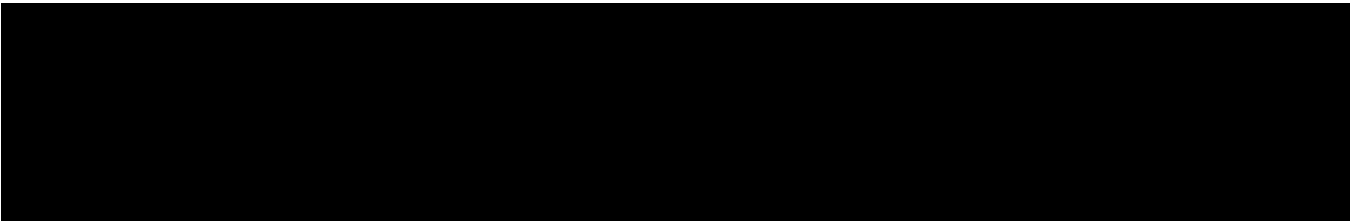


Exhibit 4.1-9 - Monthly Snow/Soiling and Albedo Losses



Performance Modeling Results

The following Exhibits summarize the estimated production from the solar Project. 8760 and 12x24 production profiles, including post-processing loss factors, are provided by appendix.

Exhibit 4.1-10

Estimates of Expected (P50) Annual Energy Production and Expected Key Performance Metrics

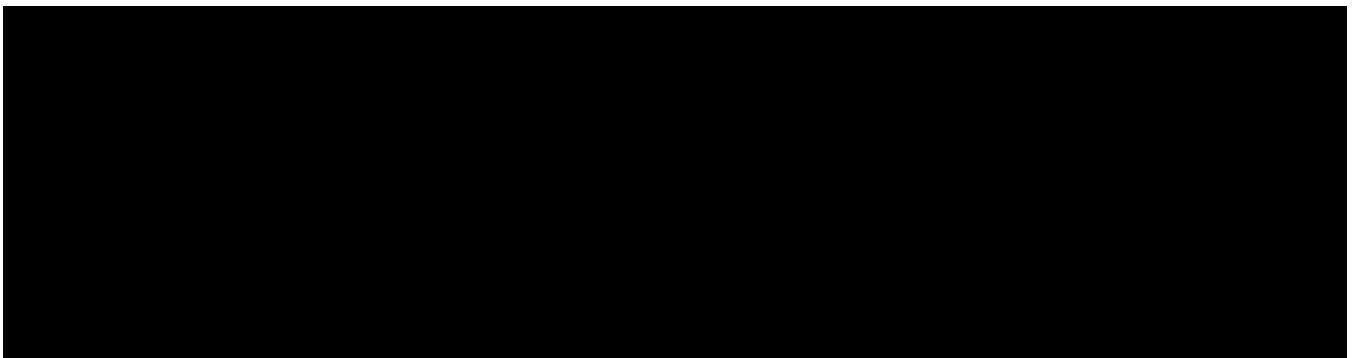


Exhibit 4.1-11 - Monthly Insolation and Estimates of Expected Energy Production

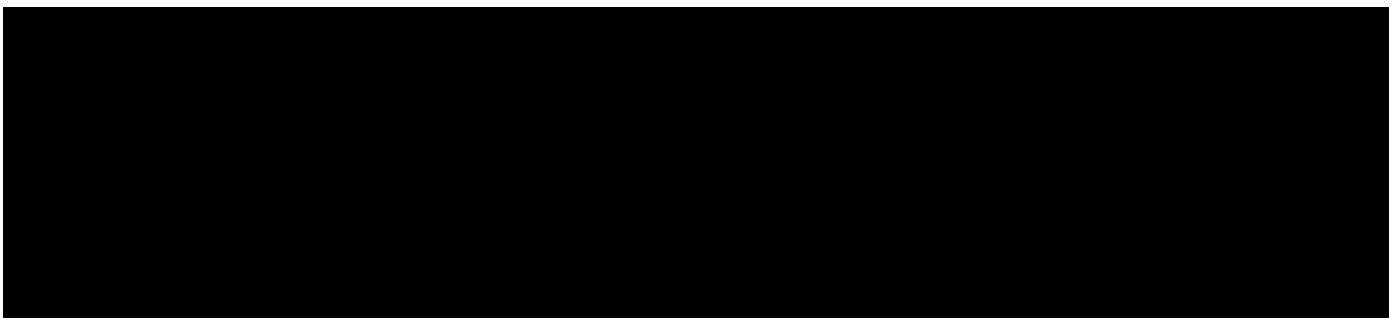
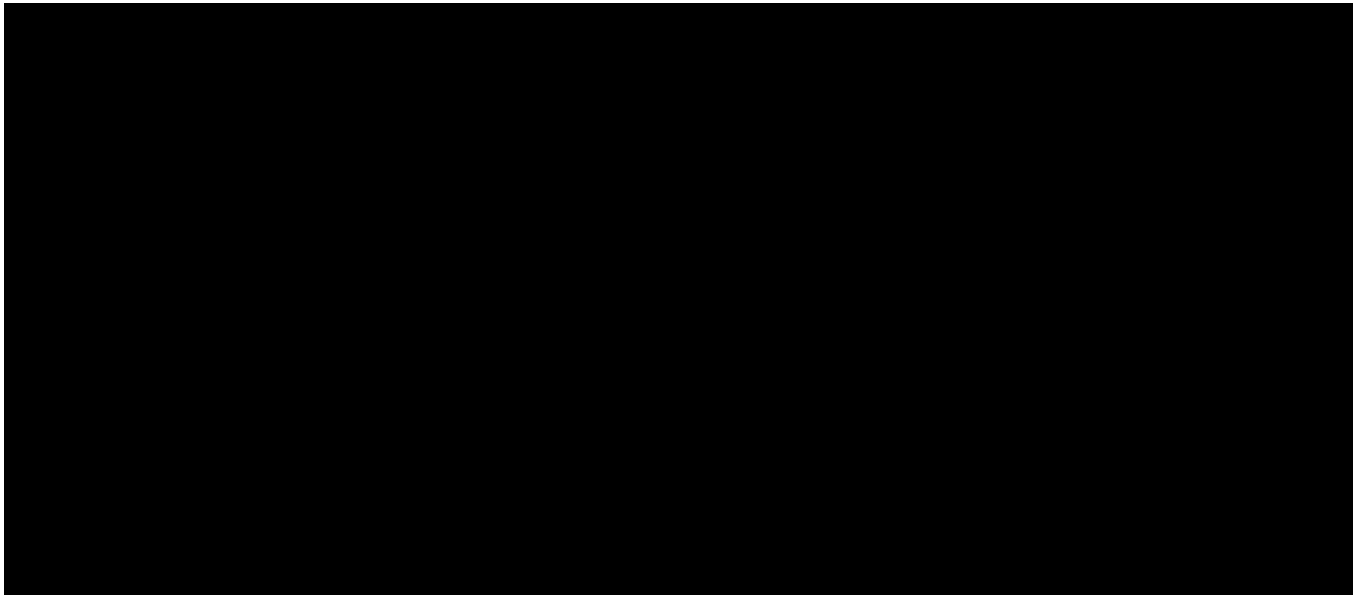




Exhibit 4.1-12 - Annual Degradation Factor of 0.75% Applied Annually for 25 Years



Hydropower

N/A

Other information as required to describe the energy resource plan

- Identification of fuel supply (if applicable)
- What is the availability of the fuel supply?
- Does the bidder have any firm commitments from fuel suppliers? If so, please provide a copy of any agreements with confidential information redacted if necessary.

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

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.

N/A – Project is not Incremental Hydroelectric Generation

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.

Three Corners Solar commits to the winter guarantee provided in the CPPD delivery profile.

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 hour 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.

N/A

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.

The Project is located in the ISO-NE control area. NEPOOL-GIS will be the system of record for RECs, and all RECs will be delivered to counterparties through NEPOOL GIS. See Section 7.6 for further information.

Section 5 of Appendix B to the RFP: Financial/Legal

Bidders are required to demonstrate the financial viability of their proposed project. Bidders should provide the following information:

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.

The Project's estimated capital cost is approximately [REDACTED]. Funding projects purely with equity capital is not customary for the construction of renewable energy projects. Consistent with our approach for other Section 83 projects developed and financed by the Longroad team, we will secure project debt and tax equity facilities for the majority of the Project capital cost. Such facilities require a "financeable" long-term contract (e.g., PPA) with high quality credit-worthy counterparties, such as the Distribution Companies.

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 providers of equity and debt during project development. Provide an organization chart showing the relationship between the 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.

Bidder is a Delaware limited liability company and a wholly owned subsidiary of Longroad Energy Holdings, LLC ("LEH"). LEH is a Delaware limited liability company and is focused on the development and operation of utility-scale wind and solar energy projects throughout the United States. LEH is owned by three separate entities: Infratil US Renewables, Inc., NZSF US Renewables, Inc. and Longroad Energy Partners, LLC.

Longroad Energy Partners, LLC, is a Delaware limited liability company whose managing partners are Paul Gaynor, Michael Alvarez, Peter Keel and Charles Spiliotis.

Infratil US Renewables, Inc., is a Delaware limited liability company whose sole shareholder is Infratil Limited; and NZSF US Renewables, Inc., is a Delaware limited liability company whose sole shareholder is the New Zealand Superannuation Fund.

Infratil is an owner and operator of businesses in the energy (mainly renewable), transport, data centers and social infrastructure sectors. Its energy operations are predominantly through Trustpower in Australia and New Zealand. Infratil is listed on both the New Zealand and Australian Stock Exchanges (IFT.NZ, IFZ.AX) and currently owns assets in excess of NZ\$6.5 billion.

The New Zealand Superannuation Fund is a NZ\$30 billion sovereign wealth fund established by the New Zealand Government to partially pre-fund the future cost of universal pension payments.

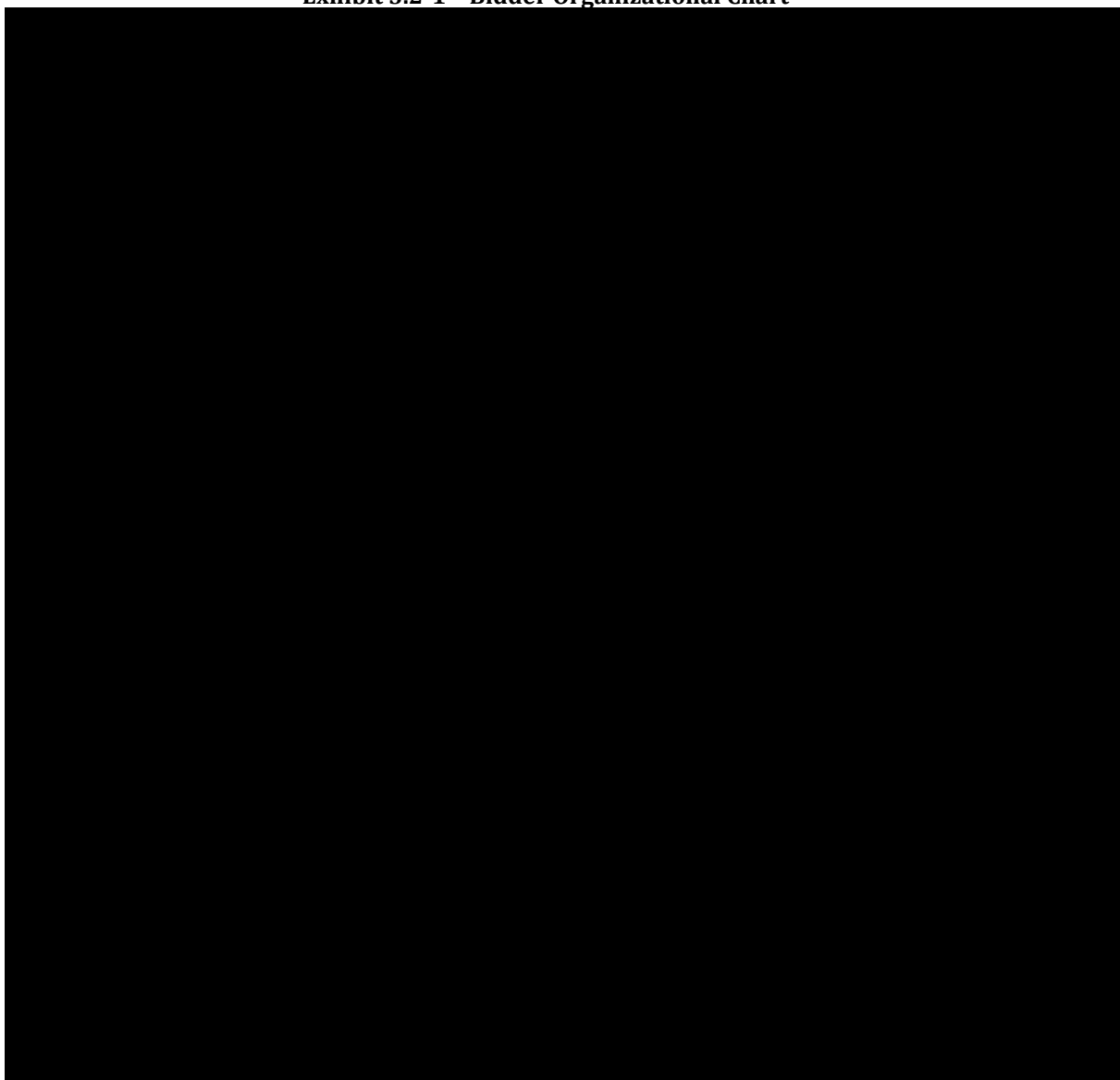
If our proposal is selected, Longroad will establish and execute a PPA through a special purpose vehicle ("Solar SPV"), or project company, which enables the flexibility required by our investors. By using this structure, we are able to give our financiers direct investment in specific projects. Exhibit 5.2 shows the relationship between the Solar SPV (with which any Distribution Company would contract via PPA) and the Bidder. Each entity is wholly-owned by the entity that precedes it.

The Management Board of LEH consists of five Managers: Marko Bogoevski, David Rae, Vimal Vallabh, Ian Bowles and Paul Gaynor.

The officers of the Bidder, and a subsequent Solar SPV will be, as follows:

Paul Gaynor	Chief Executive Officer
Peter Keel	Chief Financial Officer
Michael Alvarez	Chief Operating Officer
Charles Spiliotis	Chief Investment Officer

Exhibit 5.2-1 – Bidder Organizational Chart



Financial Qualifications and Structure

If selected for a PPA, Longroad is well-positioned to complete development, post needed security, arrange construction and permanent financing, and build the Project on schedule. The Longroad team has a consistent track record of successfully financing utility-scale wind and solar projects.

The Longroad team has successfully financed 33 utility-scale wind and solar projects encompassing over 3,300 MW of nameplate capacity, including three high-voltage transmission lines. The team has never had a situation where an economically viable project could not be brought to operation due to an inability to secure financing.

Since 2008, the Longroad team's collective track record of raising capital includes:

- Over \$11 billion of capital raised at First Wind, including project finance debt, tax equity, corporate debt, partnerships, and sponsor equity, and

- In 2015, over \$4 billion of capital raised under the SunEdison umbrella.

To complete development of the project, Longroad will utilize capital provided by its financial investors. In October 2016, Longroad Energy closed a major financing for its development business, with large equity and credit commitments from Infratil Limited and the New Zealand Superannuation Fund. Longroad's investors are committing development capital and backstopping Longroad's letter of credit facility to be utilized during the development of utility-scale renewable energy projects throughout the United States, including Three Corners Solar.

As development nears completion, the Longroad team will launch its standard process to structure the most cost-effective and efficient capital structure available to the Project. Longroad has strong relationships with numerous major financial partners and has closed both debt and tax equity financings with a diverse set of counterparties, featured in Section 11.6.

Principal Officers

Longroad's principal officers are Paul Gaynor (Chief Executive Officer), Michael Alvarez (Chief Operating Officer), Peter Keel (Chief Financial Officer), and Charles Spiliotis (Chief Investment Officer). Please see Section 11 for their biographical summaries.

5.2) 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**
- ii. **The project's existing initial financial structure and projected financial structure**
- iii. **Expected sources of debt and equity financing**
- iv. **Estimated construction costs**
- 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.**

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.

Financing Plan

The Project is currently funded with Longroad equity via its financial investors. Three Corners is a mid-stage development solar project and has incurred substantial development costs. Any remaining development expenditures, including required PPA security, will continue to be funded by Longroad.

Three Corners is expected to have the structure typical of a non/limited-recourse project financing, including construction debt coupled with tax equity and long-term debt commitments. Sponsor equity will fill the remainder of the funding need. We anticipate that roughly 20% of the construction costs will be funded with equity and the balance funded by debt and tax equity.

The construction loan (and any remaining sponsor equity) will be funded at financial close/Full-Notice-to-Proceed (“FNTTP”) and monthly loan draws will be utilized to back construction activities until the project reaches COD. Shortly after COD, the construction loan will be replaced by a combination of tax equity and long-term debt. This financing plan is customary for utility scale wind and solar projects, and one that the Longroad team has implemented for several GWs of projects. Providers of debt and tax equity have not yet been selected, but we anticipate working with financial counterparties where we have a strong relationship and proven track record of success. Debt and tax equity Letters of Intent are provided as Appendix 5.2.

Estimated Construction Costs

The Project is estimated to have a total cost of approximately [REDACTED]. This cost is inclusive of all engineering, equipment and construction costs.

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. **Current status of the project**

In New England, the Longroad team has secured over \$1 billion of project financing for an operational wind and solar fleet. This track record enhances the likelihood of successful and cost-effective financing alternatives for the Project.

Exhibit 5.3 - Longroad Team’s New England Project Financing Activity

Project	Location	Type	Size (MW)	Construction Financing (\$ MM)	Permanent Financing (\$MM)
Mars Hill	Mars Hill, ME	Wind	42	[REDACTED]	[REDACTED]
Stetson I and II	Washington County, ME	Wind	82.5		
Rollins	Lincoln, ME	Wind	60		
Sheffield	Sheffield, VT	Wind	40		
Bull Hill	Hancock County, ME	Wind	34.5		
Warren & Millbury	Warren and Millbury, MA	Solar	21		

Oakfield	Aroostook County, ME	Wind	148
Bingham	Somerset County, ME	Wind	185
Total			

5.4) For projects that include new facilities or capital investment, provide evidence that the bidder has the financial resources and financial strength to complete and operate the project as planned.

Provided in reply to 5.2 and 11.6, and by Appendix 5.2.

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.

Longroad was formed in 2016 and does not have three years of audited financial statements available. Year-end 2016 financial statements are provided as Appendix 5.5.

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

The officers of Bidder and LEH are, and the Solar SPV will be, as follows:

Paul Gaynor	Chief Executive Officer
Peter Keel	Chief Financial Officer
Michael Alvarez	Chief Operating Officer
Charles Spiliotis	Chief Investment Officer

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.

At \$20,000 per MWh per hour, the Credit Support required to be posted by Three Corners is expected to be [REDACTED]. Prior to financial close, Longroad will satisfy the development period Credit Support requirements through either (i) a letter of credit issued via its corporate LC facility (and backstopped by Infratil and NZ Superannuation) or (ii) a cash deposit. Longroad financial statements are provided as Appendix 5.5.

Following the close of the Project's construction and permanent financing commitments, Longroad's development period Credit Support will be replaced via a project letter of credit facility, to be provided by the construction and term lenders.

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.

None, Longroad does not have a credit rating.

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

Availability of the PTC/ITC provides access to tax equity investment, an instrument Longroad has utilized in various capacities for many project finance transactions.

[REDACTED]

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.

None, there are no such disputes for the Bidder or its affiliate entities.

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?

The expected operating life and depreciation period for the Project is at least [REDACTED] years.

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.

Longroad has not obtained a contracted financing commitment for this Project. As previously mentioned, Longroad has relationships with leading financial institutions and lenders (provided in reply to 5.2, 5.3 and 11.6, and by Appendix 5.2). Financing commitments require a long-term revenue commitment, such as a PPA. Thus, a PPA is the critical instrument for securing debt and tax equity, and building the Project. Additionally, the tenor of the PPA will influence the debt sizing, because longer tenors will provide more debt capacity.

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.

Longroad has not obtained any long-term energy, capacity or REC sales agreement(s) for the Project.

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

Bidder is a wholly owned subsidiary of LEH. LEH is a Boston based company focused on the development of utility-scale renewable energy projects throughout the United States. LEH owns several project company subsidiaries through which development and contracting activities are conducted.

Bidder's ownership structure is described in Section 5.2.

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?

No.

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.

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.

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.

There are no present disputes or actions between the Bidder or an affiliate of the Bidder and any Distribution Company, or any such affiliates.

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.

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.

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).

Bidder confirms that the Bidder, directors, employees and agents of the Bidder and any affiliate of the Bidder are currently and have not been under investigation by any governmental agency 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.

Longroad will require an internal approval process, which will be initiated during the negotiation process, if selected.

5.20) 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.

Three Corners Solar will conform to all applicable FERC regulatory requirements, including the following:

- The Project will include generation interconnection facilities but will not own or operate any transmission facilities subject to capacity allocation or open access concerns;
- The Project utilizes existing transmission owned and operated by [REDACTED];
- The Project will seek market-based rate authority from FERC at the applicable time. This will be obtained prior to commercial operation in advance of energy production; and
- The Project will comply with all applicable affiliate reporting requirements and has no ownership affiliation with its transmission partner or any of the Distribution Companies.

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; and Commercial (including real property) relationships with any Distribution Company.**

To our knowledge the Bidder does not have any affiliation with any Distribution Company or any affiliate.

**Section 6 of Appendix B to the RFP:
SITING, INTERCONNECTION, AND DELIVERABILITY**

This section of the proposal addresses project location, siting, real property rights and interconnection issues. Bidders should ensure that the threshold criteria outlined in Section 2.2 of the RFP for generation, transmission proposals, and system upgrades are verified in their responses.

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, 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.

Exhibit 6.1-1 – Project Site Plan

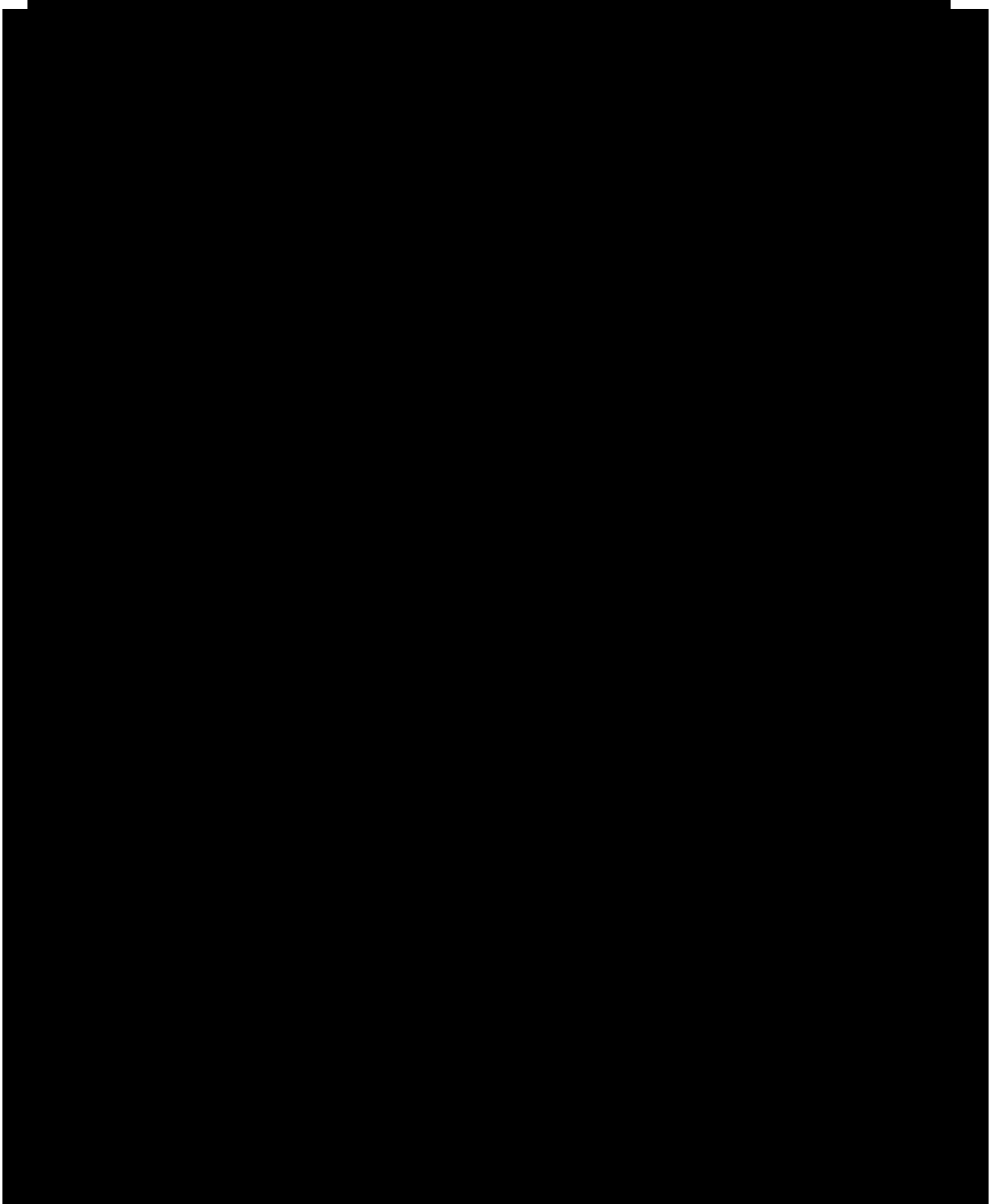
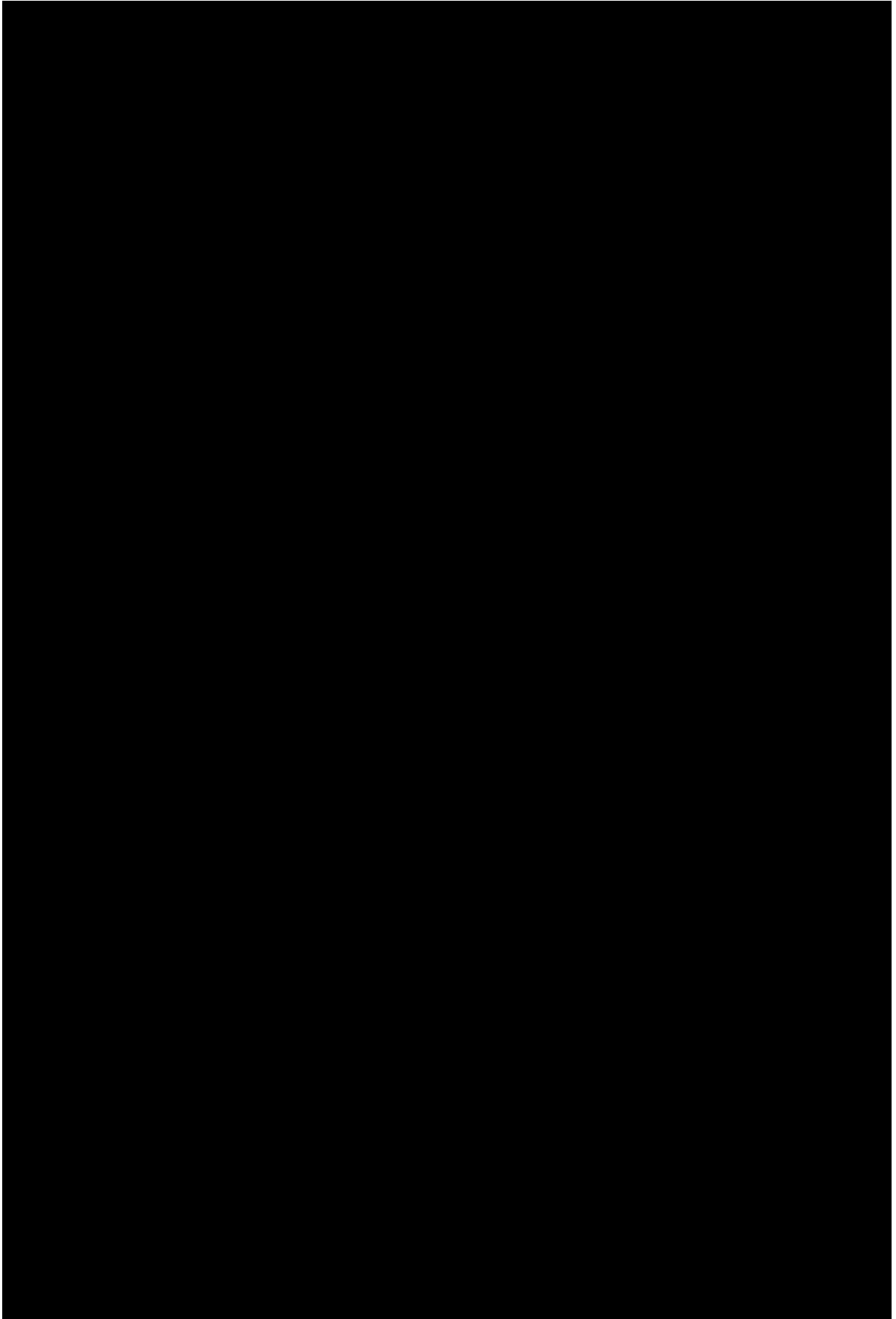


Exhibit 6.1-2 – Project Interconnection Route



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.

- 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)?
- ii. If so, please detail the Bidder's rights to control the Eligible Facility site and/or Transmission Project route control.
- 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.
- iv. iv) Identify any joint use of existing or proposed real property rights

Three Corners Solar has executed [REDACTED] Options to Lease in place with [REDACTED] major landowners for the Project site. The lease terms specify a [REDACTED]. Any required Project Right of Way agreements will be in the form of [REDACTED]. Documentation of all existing options to lease is provided as Appendix 6.2.

These options, in addition to necessary Right of Way agreements and easements for the project generator lead, will be exercised upon completion of key project development milestones including (but not limited to) the following:

- Execution and regulatory approval of power purchase agreement,
- Receipt of key project permits (MDEP, [REDACTED]),
- Execution of project tax agreements,
- Execution of LGIA with [REDACTED], and receipt of Federal Energy Regulatory Approval.

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.

The Project's arrays will be in the [REDACTED]. The Project arrays and generation lead in [REDACTED] are zoned Rural District, where Solar Energy Systems are allowed as a Conditional Use. Landowner partners have already approached the Town of [REDACTED] regarding the proposed project, and have received indicatively positive feedback regarding the benefits of the proposal. Longroad has a long history in Maine of engaging communities and developing projects that are well received and yield community benefits while minimizing land use impacts.

Longroad will have a pre-application meeting with [REDACTED] in the Fall 2017 with the Code Enforcement Officer (“CEO”) to discuss the project and identify additional information that the Town may wish to review in the application. Following the meeting with the CEO, the application will be submitted in early [REDACTED] requesting a Conditional Use Permit (“CUP”) be issued for the Project. The initial review of the application will take 5 days by the CEO, to determine whether additional information is required or the application is deemed complete. Once the application is deemed complete, the [REDACTED] Planning Board will review the application. The project proposal will then have a public hearing. A decision by the Planning Board will be made within 35 days of the public hearing. Longroad anticipates having a CUP by the end of [REDACTED].

A CUP application also will be submitted to the Town of [REDACTED] for the generation lead to the [REDACTED] Substation. The lands in the Town of [REDACTED] are all zoned Rural where the proposed route is located, where a utility line is an allowed use. The application will be submitted to the [REDACTED] Planning Board, who shall deem the application “complete enough” to then consider the proposal for approval. A public hearing will be held on the project soon after the application is deemed complete. The Planning Board will have 35 days to take final action (approve, deny, or approve with conditions) on the proposal after the hearing. Longroad will submit the CUP application in early [REDACTED] and work with the Town of [REDACTED] to acquire the permit by June [REDACTED]. See Section 7 for additional information about the Project’s permitting plan.

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).

The Project’s arrays are located on lands that are currently being managed for agricultural and silvicultural use. The fields are primarily used for hay and corn, to support the local dairy industry in the region. The forested areas are in logging rotations where the trees are processed at a local sawmill. There are farmhouses on large lots scattered throughout the region, with small towns interspersed across the countryside. The Project area is relatively flat with lightly rolling areas that are suitable for solar, requiring very limited grading and in areas with agricultural use, no grubbing will be required.

The Project arrays are outside of the 100-year interval floodplain as per the Federal Emergency Management Agency (“FEMA”) mapping of the area. There are two narrow floodplains that would be crossed by the generation lead to the substation; both of the crossings would be co-located adjacent to existing power lines where the poles are outside of the floodplain.

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.

Please see Section 6.1 and Exhibit 6.1-2 to view the path from the generation site to the POI, which is designated as an ISO-NE PTF. Numerous paths from the facility to the POI at [REDACTED] have been identified. The featured path has been designed to minimize feeder length

and line losses. The featured path utilizes public Rights of Way. Permitting and site control of the interconnection path will commence in the second half of [REDACTED]

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.

The Project filed a Large Generator CNR interconnection request with ISO-NE on July 25, 2017, and has been assigned a valid queue position 670. The Project will first be studied for Feasibility, with those results anticipated in [REDACTED]. The Project's System Impact Study ("SIS") is expected to begin in [REDACTED], with results expected in [REDACTED]. Following completion of the SIS, the Project will enter into LGIA negotiations and apply for I.3.9 approval, both of which are expected to be complete by the end of [REDACTED].

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.

Please reference the response to question 6.6 for the status of interconnection studies, and steps to be completed for an executed interconnection agreement with ISO-NE.

Longroad commissioned [REDACTED] to complete an enhanced feasibility study for the Three Corners Solar project, including steady state and stability analysis approximating the ISO-NE interconnection studies. The study, attached in Appendix 6.7, considered the Project's dispatch against nearby generation in the [REDACTED] north of the [REDACTED] interface in accordance with the ISO-NE interconnection procedures. Relevant prior-queued projects, as well as planned and in-service upgrades to the transmission system were included in the base cases.

Study results indicate that the proposed Three Corners project would have no significant adverse impacts on the reliability, stability, or operating characteristics of the [REDACTED] transmission system, the transmission facilities of another Transmission

owner, or the system of a Market Participant. The report is included as Appendix 6.7, and contains a discussion of study assumptions and results.

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.

Please see Section 6.7 for a description of the enhanced feasibility study completed for the Project by [REDACTED].

The Project has a valid CNR interconnection request (QP670) with ISO-NE.

Longroad commissioned [REDACTED] to conduct a third-party Capacity Capability Interconnection Standard ("CCIS") assessment for the Three Corners Solar project. The CCIS assessment considered a base case and three sensitivity cases. The base case included generators that qualified in the FCA 11 and maximum [REDACTED] generation conditions with high North-South transfer bias. The additions of the [REDACTED] clusters to the base case were considered in two separate sensitivity cases, and the addition of both clusters to the base case was considered in a third sensitivity case.

Analysis results indicate that the Three Corners Solar project would meet the CCIS requirements in the base case either without upgrades or at most, with a simple upgrade involving the addition of a single 345kV breaker at [REDACTED], and the cost of such upgrade has been included in this bid. The Project was shown to qualify in all three of the sensitivity cases without the need of network upgrades.

The CCIS analysis contains a full discussion of study results and assumptions, and is included as Appendix 6.8.

A Preliminary Non-binding Impact (PNOI) Analysis will be initiated with ISO-NE in [REDACTED], and the Project will take part in the FCA qualification process beginning with the Show of Interest for FCA 13 in [REDACTED].

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.

Please refer to the response to Section 6.8 for a discussion of alternative scenarios.

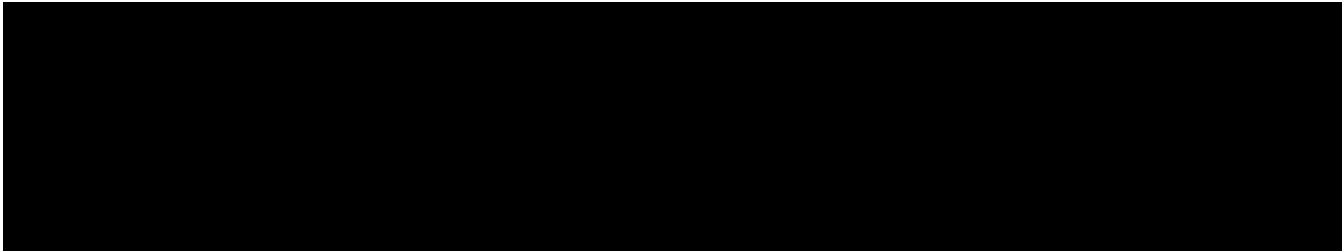
6.10) Provide the electrical models of all energy resources supporting the proposed project in accordance with the filing requirements of the ISO-NE Tariff Schedule 22 and 23.

The electrical models in accordance with the filing requirements of the ISO-NE Tariff Schedule 22 Large Generator Interconnection Procedures are included as Appendix 6.10.

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.

The electrical one-line diagram is included as Appendix 6.11.

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.



The enhanced feasibility study contains a full technical description of the Project and is included as Appendix 6.7.

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.

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

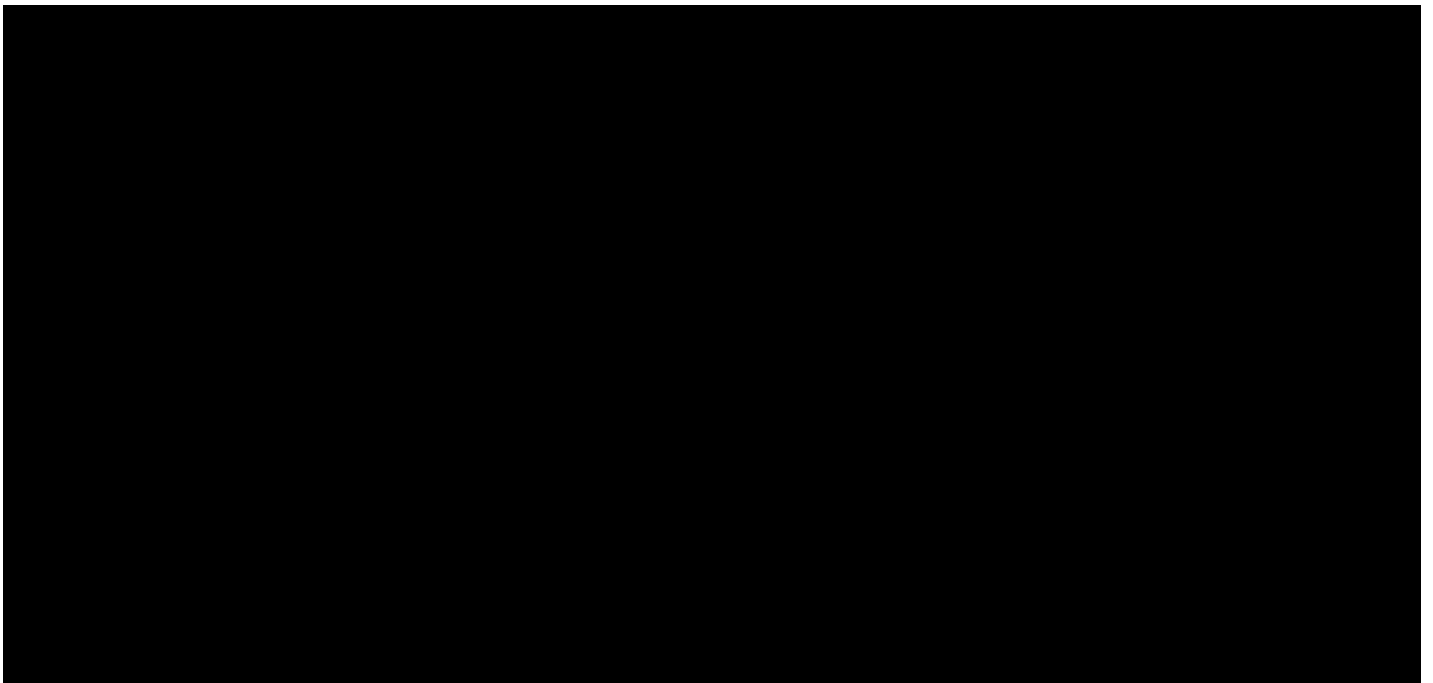
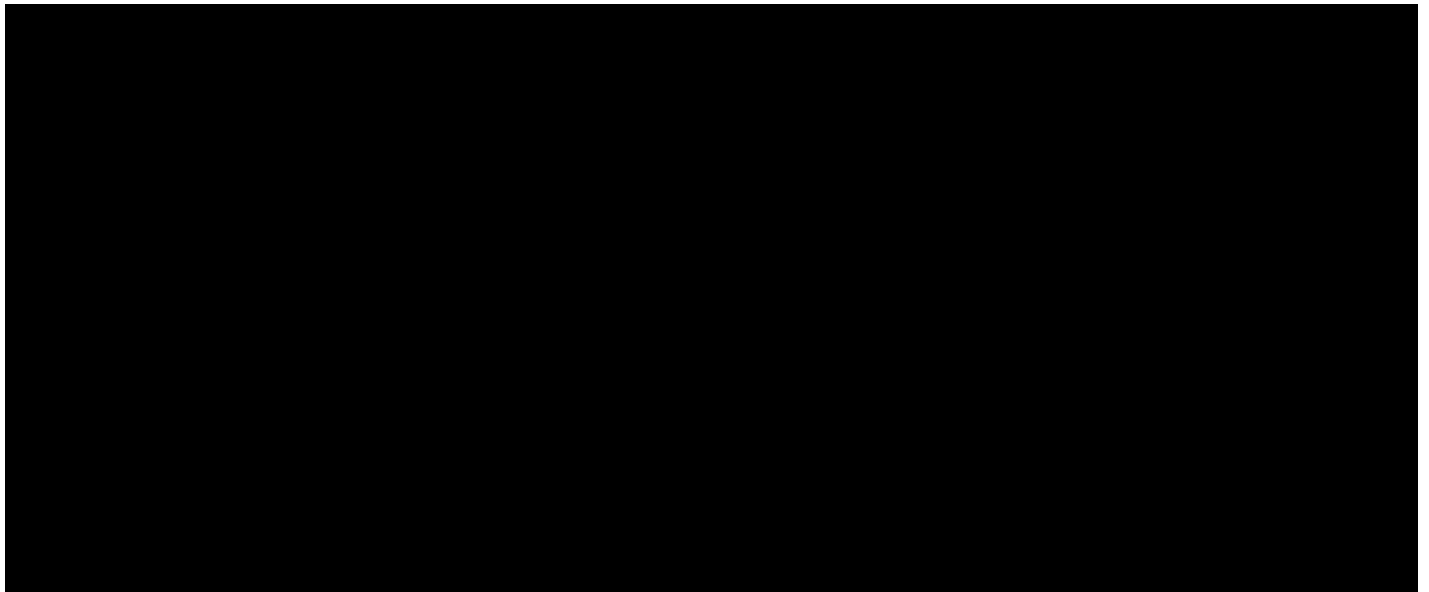
- **Line Data: Voltage/Thermal Ratings/Impedances (r, X and B)/Line Length/to and from bus numbers and names**
- **Transformer data: (including Phase shifting transformers if applicable): Terminal Voltages/Thermal Ratings/Impedance/To and from bus numbers and names**
- **Reactive compensation models 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.**

N/A – “Transmission facilities” are not proposed.

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.

As required by this RFP, Three Corners Solar will be interconnected to an ISO-NE PTF and therefore energy will be delivered to the Distribution Companies at the Project's busbar. Section 6.15 further demonstrates that the Project's energy can be delivered to the Distribution Companies without material constraint or curtailment.

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.





**Section 7 of Appendix B to the RFP:
Environmental Assessment, Permit Acquisition Plan and New Class I RPS
Certification**

This section addresses environmental and other regulatory issues associated with project siting, development and operations for both generation and transmission projects, as applicable.

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

The Longroad team has a successful track record of permitting utility-scale wind and solar projects in the Northeast, and throughout the U.S.. Since 2005 and during their tenure at First Wind and SunEdison, the Longroad team permitted eight wind projects in Maine, two wind projects in New York, two solar projects in Massachusetts and one wind project in Vermont, all currently operating. The Mars Hill project in Maine and the Sheffield project in Vermont were the first utility-scale wind projects approved and built in their respective states.

Natural Resources Regulatory Review

A list of the potentially applicable federal, state, and local natural resources regulatory permits or licenses for the Project are listed in Exhibit 7.1.

Federal

The Clean Water Act (“CWA”) includes wetlands and waterways within the scope of natural resource areas that are protected from development without a permit, if a threshold for impacts is exceeded. A field wetland delineation was completed for the Project, so areas that would likely require permitting for wetland impacts have been identified. The array layout was designed to avoid impacting wetlands, but some new roads that connect array areas will cross a very limited amount of streams. In order to construct the proposed project, a Maine General Permit will be requested from the US Army Corps of Engineers (“USACE”) to authorize that activity. The General Permit program has pre-determined limits within which authorization can be granted with a limited review and we anticipate will require no more than 9 months to acquire.

There are three federal acts or laws that the US Fish and Wildlife Service administers which could be triggered by the proposed project: The Endangered Species Act (“ESA”), the Bald and Golden Eagle Protection Act (“BGEPA”), and the Migratory Bird Treaty Act (“MBTA”). A review of the ESA species in the project vicinity yielded no occurrences of endangered or threatened species which could be at risk of take, and thus the requirement for an incidental take permit (“ITP”). One threatened species, northern long-eared bat (“NLEB”), could occur in the project vicinity but with appropriate seasonal clearing restrictions would not be affected by the project. While bald eagles may fly through the project area, no nesting habitat is present in the project area so there is no potential for any negative impacts, and therefore no need for an eagle take permit. Nearly all birds are protected under the MBTA, which also requires the avoidance of taking of individuals. In order to manage the risk of take at the proposed project area, a bird conservation strategy (“BCS”) specific to the project will be developed that includes best management practices to minimize the potential for construction and operational taking. However, no further permitting will be required.

In accordance with the National Historic Preservation Act (“NHPA”), a review of known cultural and archaeological resources will be reviewed to determine whether any additional cultural investigatory work will need to be completed. The process will be coordinated with Maine Historic Preservation Commission during the MDEP review period, and resulting commitments will be incorporated into the conditions in the DEP site permit (see below).

The proposed solar project will not trigger the thresholds for requiring any Federal Aviation Administration coordination or permits, either by height thresholds or proximity to airports.

State

The MDEP permit, which covers Site Location, the Natural Resources Protection Act, Water Quality Certification, and the Construction General Permit, is the major permit for the Project. Resource evaluation across many disciplines will be completed and included in the application to MDEP. Once the application is submitted, Longroad will work closely with MDEP to support expedient processing of application materials by providing additional information as requested. The Longroad team has worked through the MDEP process successfully on seven of its eight wind projects developed in Maine and is very experienced with MDEP permitting.

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

Wetlands

Wetland and waterbody resource delineations were completed in the summer of 2017 to identify areas suitable for development. There are some channels that will be crossed for access to the array blocks, so state wetland permitting will be conducted as part of the MDEP review. No vernal pools are known to occur within the project area based on a database search. Vernal pools have special protections under the MDEP rules, so specific coordination to confirm that no impacts will occur will be completed.

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 to wetlands, waterways, and vernal pools.

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. Longroad has extensive experience with wildlife surveys in Maine and will tailor these studies based on highest risk species within the project area. Wildlife surveys will be conducted in the project area for bats and breeding birds.

Additionally, the construction and operation of the Project will not impact Deer Wintering Areas, or Waterfowl and Wading bird habitat.

Stormwater

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

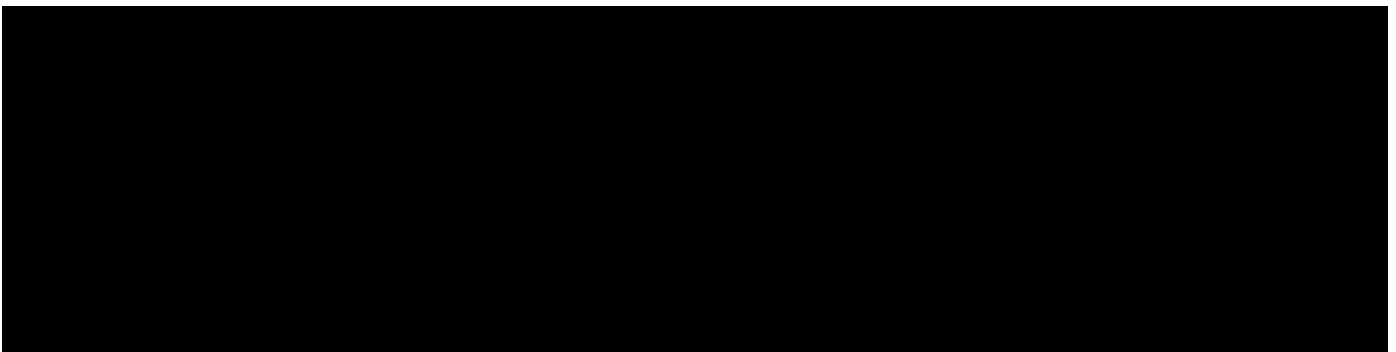
Soils

All investigative soil work required to finalize the Project design and satisfy the MDEP standard will be completed.

Economic Benefits

Three Corners Solar is an approximately [REDACTED] capital project that will generate significant economic benefits during its development, construction and operation (described further in Section 13).

Three Corners Solar will establish a charitable giving program for the local area with a budget of [REDACTED] per year. The program will be administered by a third-party such as [REDACTED], a platform utilized in the past by the Longroad team, or similar suitable administrator for the program.⁵



Longroad will provide access to production data and information about the development, construction and operations of solar projects as requested.

Local

Local approval will be acquired from the Town of [REDACTED] for the proposed [REDACTED] Project. The project is mapped Rural by the Town, and is an allowed use with issuance of a Conditional Use Permit (“CUP”). The Town has developed a Solar Energy Systems ordinance that has conditions that our proposed layout and development will be able to meet consistent with the Town’s requirements. A CUP application will also be submitted to the Town of [REDACTED] for the generation lead to the [REDACTED]. The lands in the Town of [REDACTED] are all zoned Rural where the proposed route is located, and where the utility line is an allowed use.

Exhibit 7.1 – Permit Requirements and Planning

Permit	Agency	Trigger	Timeline	Application Review
<u>Federal</u>				
Clean Water Act (CWA) Section 404	US Army Corps of Engineers	Impacts to wetlands or waterways	Maine General Permit: 9 months	9 months
Incidental Take Permit (ITP) under (Endangered Species Act (ESA))	US Fish and Wildlife Service	Impacts to endangered or threatened wildlife	N/A: no permit required	N/A
Bald and Golden Eagle Protection Act (BGEPA)	US Fish and Wildlife Service	Impacts to eagles or eagle nests	N/A: no permit required	N/A
Migratory Bird Treaty Act (MBTA)	US Fish and Wildlife Service	Impacts to migratory birds	Bird conservation strategy (BCS) will be implemented; no permit required	9 months for coordination
National Historic Preservation Act (NHPA)	Maine Historic Preservation Commission	Impacts to sites eligible for national registry	Coordination, no permit	6-9 months
Determinations of Hazard (automatic for	Federal Aviation	Structures over 200 feet	N/A: no permit required	N/A

structures over 500 feet)	Administration ("FAA")			
<u>State</u>				
Site Law/Natural Resources Protection Act ("NRPA")/401 Water Quality Cert./Construction General Permit	Maine DEP	Primary permit required for the Project.	Field studies and permitting review: 18 months	18 months
LUPC Certification	Maine LUPC	LUPC will certify through the MDEP process that the Project meets their land use standards	Review by LUPC occurs concurrently with DEP review; LUPC certification required prior to DEP permit issuance.	Project is compliant with local site laws; no additional time (see MDEP)
National Historic Preservation Act (NHPA)	Maine Historic Preservation Commission	Impacts to sites eligible for national registry	Coordination: 18 months, concurrent with DEP review	18 months
Crossing or Encroachment Permit	Maine Department of Transportation	Permit to access state road	Encroachment permit: 6 months	6 months

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.

See Section 7.1 for the permitting plan, and Exhibit 7.1 for the times required for each permit, as well as Appendix 10 for a permitting timeline in context of the Project schedule.

The CWA permit with USACE will require completion of a jurisdictional delineation ("JD") which will be submitted to USACE with a Category 2 or Individual dredge and fill permit application. USACE will review the application and the best management practices ("BMPs") that we will commit to in our plan of development, to avoid resources as much as possible and then minimize potential impacts as practicable. USACE will review our cultural resource report and communicate with the MHPC to confirm that we would avoid impacts to potentially eligible resources as per NHPA. USACE also will review our wildlife and wildlife habitat report and reach out to the USFWS to review effects on these resources. Longroad will meet with USACE in a pre-application meeting, and again during the application processing period to support the project's permit review. USACE permit can be issued within 9 months of the initial application submittal.

While no permit is required from USFWS, Longroad will provide a species review and BCS with a request for a review letter. The Service typically provides comments within 9 months of receipt of a request, which would be provided to USACE during their permitting review.

The MDEP permitting process will be started with agency consultation and the completion of resource studies, which will be used to develop the application. The MDEP application is a very robust document which details the project development from construction through decommissioning, and includes potential effects or lack of effects across each resource area. Longroad will meet with MDEP during a pre-application meeting, and then following MDEP receipt of the application a determination will be made regarding the need for a public hearing (which is not required). If no hearing is conducted, then the decision will be made within 180 days. If a hearing is held, then the process could take an additional 3 months to address public comments that may be submitted. Throughout the application review process, Longroad has found that regular meetings and contact with MDEP has been a means for successful permitting completion. The LUCP certificate will be reviewed and issued during the MDEP review process, to confirm that the project is consistent with all state ordinances.

A MDOT crossing permit for locations where electrical lines cross public roads will be acquired within 6 months of the application submittal. This permit is relatively straightforward because the MDOT rules regarding allowable crossings are well established. With the issuance of the town permits and landowner support, this permit is readily obtainable.

The Town of [REDACTED] has a CUP process that is clearly delineated, starting with a pre-application meeting with the town to introduce the project. Informal discussions have already yielded a positive response from the town, so we anticipate that the pre-application meeting will be an opportunity to discuss in more detail the proposed project layout and potential effects on the Town. Once the application for a CUP has been submitted, the Town reviews the application and holds a hearing where we would be present to discuss our proposal. The Town then makes a permit decision, which should not take more than [REDACTED] days. The lands in the Town of [REDACTED] are all zoned Rural where the proposed route is located, and where the utility line is an allowed use.

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:

- i. Impacts during site development**
- ii. Transportation infrastructure**
- iii. Air quality impacts**
- iv. Access to water resources/water quality impacts**
- v. Ecological and natural resources impacts**
- vi. Land use impacts**
- vii. Cultural resources**
- viii. Previous site use (e.g., greenfield, brownfield, industrial, etc.)**
- ix. Noise level impacts**
- x. Aesthetic/visual impacts**
- xi. Transmission infrastructure impacts**
- xii. Fuel supply access, where applicable**

Site Development

The Project has been reviewed for potential impacts. Wetland, as discussed above, are expected to be impacted only at a limited number of road crossings, and the permitting pathway is clearly allowed under USACE permit program. While Atlantic Salmon habitat is listed as potentially present in some streams in the vicinity of the project, proper construction and design for crossings will be implemented with a commitment to BMPs to ensure that no impacts occur. There are no ESA species that would be directly affected by the project, since land clearing for the northern long-eared bat would take place outside the breeding season. No vernal pools or deer wintering areas will be affected by the project. Thus, site development impacts will be fully avoided or permitted prior to construction initiation.

Transportation Infrastructure

Transportation infrastructure will include gravel roads through the project site. An access road and permit will be acquired for the project.

Air Quality Impacts

Air quality will not be degraded as a result of the Project, as solar farms do not emit any air emissions. Air emissions resulting from construction vehicles will be minimal due to the short duration of construction. Dust emissions will be controlled during construction activities and should be minimal during operations, because disturbed areas will either be re-vegetated or graveled.

Access to Water Resources/Water Quality Impacts

There will be no change in access to water resources. Water quality will be protected by avoidance and minimization to wetland and stream resources, the use of vegetative buffers, an intensive evaluation of stormwater quality and quantity, and an erosion control plan. The civil plans and associated infrastructure and buffers that protect water resources will be designed to meet the state and federal standards.

Ecological and Natural Resources Impacts

The Project is predominantly in agricultural or silvicultural use, and will be converted to a solar farm. The area is actively managed and as such is disturbed rather than natural ecological native communities, so there will be very limited or no impacts to native habitats. The project has been sited carefully to avoid and minimize impacts to the natural environment, and is situated near existing roadways.

Land Use Impacts and Previous Site Use

For many decades, the Project site has been in active silvicultural and agricultural use. There are not any pristine native habitats present in the project area that will be affected, though the waterway areas (noted above) will have a small area of impact where proposed roadways will cross a limited number of stream areas. There are local paved roads adjacent to much of the project, and on-site roads through some areas.

Cultural Resources

Longroad will complete historic archaeological, Euro-American archaeological, and historic architecture investigations of the project area to determine potential impacts to historic resources. Any impacts to potentially eligible areas will be avoided, if discovered, though the initial review did not reveal any known resources.

Noise Level Impacts

The proposed project will not emit any noise during operation, and will comply with construction noise standards promulgated by the state or municipality.

Aesthetic/Visual Impacts

A Visual Impact Assessment will be conducted for the Project, but with setbacks from public areas including roads, will not have an unreasonably adverse impact on scenic values near the project area. The associated facilities will not be of a location, character, or size to cause an unreasonable adverse visual effect on the scenic character of the study area.

Transmission Infrastructure Impacts

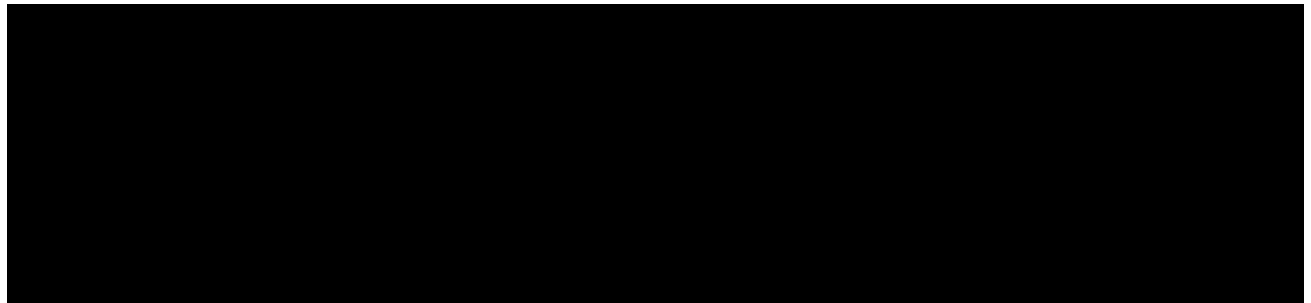
The generator lead will run approximately [REDACTED], originating at the collection substation located within the solar array area and terminating at a Substation. The lead will be predominantly co-located with existing transmission lines along the route. The corridor will be as narrow as feasible for construction and maintenance during operation, and with the existing network of power lines, will not add notably to the visual character of the region. Potential impacts to other resources will be avoided and minimized, and permitted through the MDEP and USACE processes.

Fuel Supply Access

Compared to other sources of energy generation, solar projects utilize minimal amounts of fuel. Fuel is required for vehicles during construction and operations and will be stored in the required containers away from natural resources. A Spill Prevention, Control, and Countermeasures ("SPCC") plan will be implemented for the Project.

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.

Community outreach and support is an integral element of Longroad's development strategy and operational plans. We are proud that our projects often become symbols of local renewable energy leadership, and strive to help communities promote the projects for educational purposes and as examples of environmental stewardship. Three Corners Solar is located, in part, on land owned by [REDACTED]:



The [REDACTED] is very supportive of the Three Corners Solar project given that it will provide lease revenue and educational opportunities.

Host community

Longroad will work with the towns of [REDACTED] to be an active and engaged member of the community that will contribute both economically as well as to the education of the area.

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. The income for local landowners who are engaged in education, agricultural, dairy farming, and silvicultural professions will support their ability to continue a traditional way of life that has been a part of the community for generations. 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. Three Corners Solar will provide a stable, diversified income stream for landowners.

Longroad Corporate Citizenship

The Longroad team has consistently demonstrated our commitment to supporting our host communities specifically through educational support:

- **Direct support:** Longroad has established a budget of [REDACTED] per year for charitable giving from the project company.
- **Sponsorship of community events:** Longroad typically provides sponsorship for local civic organizations, environmental groups, and events in our projects’ host communities.
- **Outreach to local schools:** The Longroad team has a strong track record of supporting and participating in local science and technology curriculum such as the Maine Wind Blade Challenge and Casco Bay High Schools Energy Policy Symposium. We also make our projects available for tours (subject to operating schedules and constraints), which encourage Maine residents and students to learn about renewable energy, technology, and environmental stewardship.

Letters of support for the Project are provided as Appendix 7.4.

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.

Three Corners Solar will be eligible for Class I renewable energy source qualification under current Massachusetts law as a new-build solar power facility. The Longroad team has routinely qualified for Class I renewable energy source status for all of its prior New England wind projects in Massachusetts and other New England states.

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.

NEPOOL-GIS will be the system of record for REC transfers and such transfers will occur quarterly, unless otherwise specified in the PPA. The production of the RECs will be auditable against generation information provided by ISO-NE for the Project and annual audited financials with a reputable third party that will include production actuals. The facility will also be qualified to produce RECs in the state or states specified by the REC buyer and such qualifications will be maintained throughout the life of the Project (for example, pursuant to Massachusetts Class I standards).

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.

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 Project or the ability to obtain or retain the required permit.

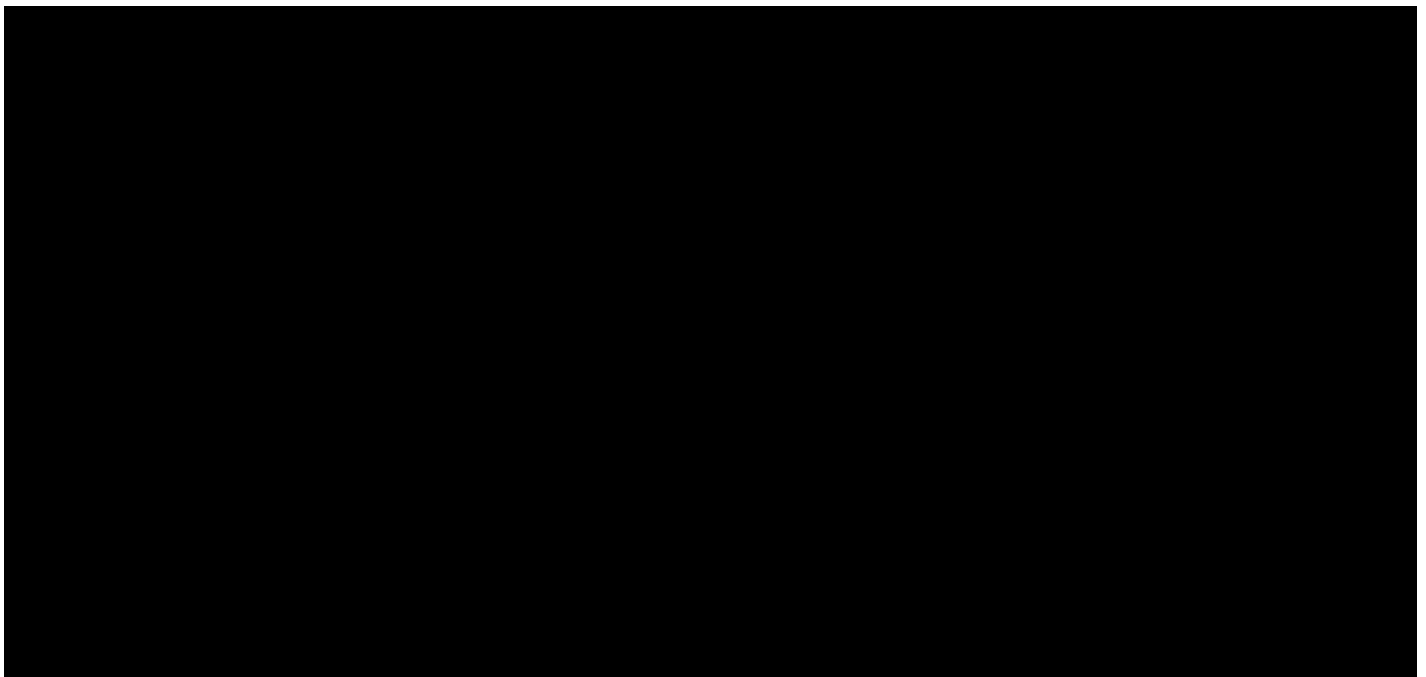
**Section 8 of Appendix B to the RFP:
Engineering and Technology**

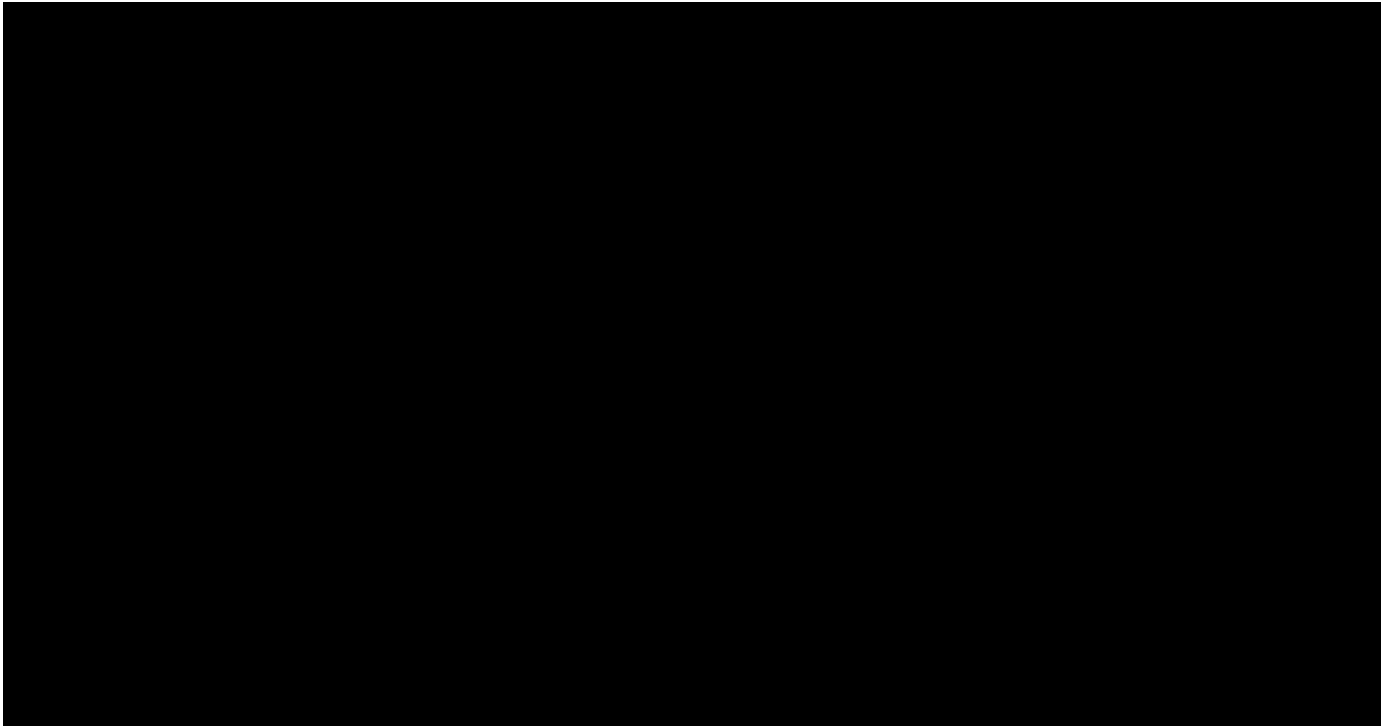
This section includes questions pertinent to the engineering design and project technology. This section must be completed for a project that includes new facilities or capital investments for both generation and transmission components if applicable. Bidders should provide information about the specific technology or equipment including the track record of the technology and equipment and other information as necessary to demonstrate that the technology is viable.

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

Exhibit 8.1 - Preliminary Engineering Plan Summary



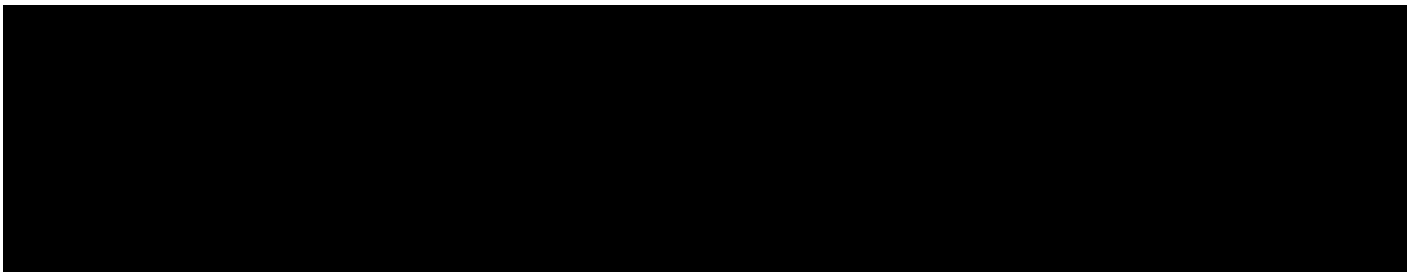
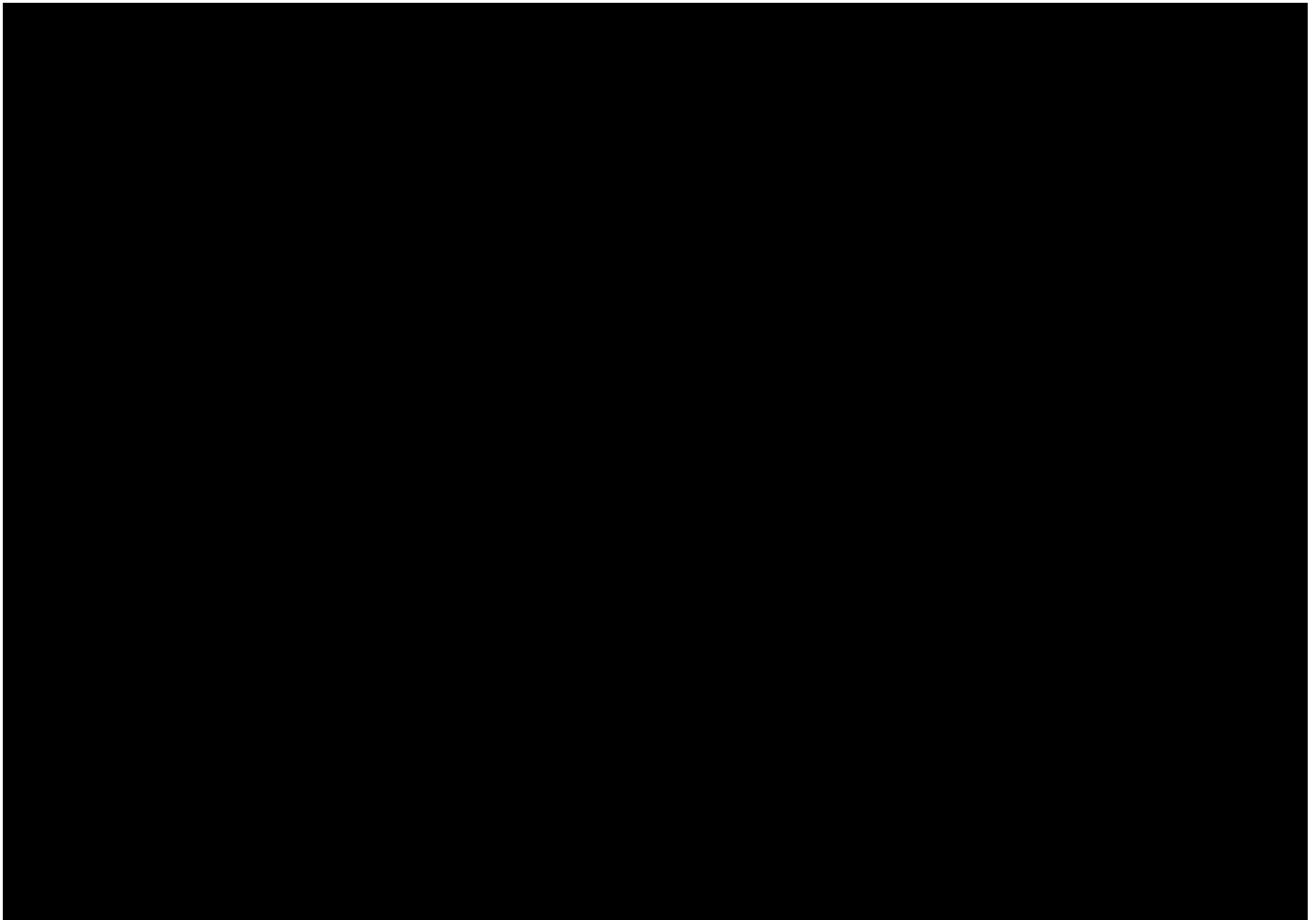


8.2) If the bidder has not yet selected the major equipment for a project, please provide a list of the key equipment suppliers under consideration.

Please see “Manufacturer of the Equipment” in Exhibit 8.1.

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.

For major equipment, and featured manufactures:



[REDACTED]

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.

The technology, make, and model are commercially mature (Section 8.3).

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.

Major equipment and featured manufacturers are described in Exhibit 4.1-6 and Exhibit 4.1-7, and are described further in “Contract for the equipment” in Exhibit 8.1 and Section 8.3; interconnection equipment and facilities are described in Section 6.12 and specified further in Appendix 6.8.

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.

Longroad is in discussions with [REDACTED] regarding supplying the primary equipment for the Project.

These discussions will move towards firm equipment orders upon completion of key project development milestones including (but not limited to) the following:

- Execution and regulatory approval of power purchase agreement
- Receipt of key project permits (MDEP, Town of [REDACTED])
- Execution of project tax agreements
- Execution of LGIA with [REDACTED], and receipt of Federal Energy Regulatory Approval.

**Section 9 of Appendix B to the RFP:
OPERATION AND MAINTENANCE**

Projects that can demonstrate that the operation and maintenance (“O&M”) plan, level of funding, and mechanism for funding will ensure reliable operations during the term of the contract or the tariff are preferred.

9.1) Provide an O&M plan for the project that demonstrates the long term operational viability of the proposed project. The plan should include a discussion of the staffing levels proposed for the project, the expected role of the project sponsor or outside contractor, scheduling of major maintenance activity, and the plan for testing equipment.

Longroad’s O&M plan is designed to manage all operational and commercial matters related to the facility. Longroad will provide the following resources at or for the Project 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.

Longroad employs a fully integrated, data-driven operations and maintenance strategy that maximizes project value. Longroad’s in-house operations capabilities include real-time resource monitoring and analysis, on-site O&M personnel, and regional Commercial Asset Management staff.

A key to our success is early engagement in the development and construction process to ensure seamless transition to operations. Our operations team works alongside our project developers and construction managers from the earliest phases of project development.

During the operations phase, we combine advanced performance monitoring and analysis from our Remote Operations Center (“ROC”) with project financial data from our Asset Management team to continually optimize site performance. In each case, we utilize cloud-based data management platforms to manage data and optimize project operational and financial performance. Through the use of these tools, decisions are made with a complete understanding of the short- and long-term financial implications to our projects. In addition to our experienced in-house staff, we partner with Tier One suppliers of major equipment such as modules, trackers, inverters and transformers to ensure high performance of the project throughout its expected life.

Safety

Longroad's first priority is the safety of our personnel and those who work on our projects. Each operational review meeting begins with a review of safety lessons learned and every operating decision is made within the framework of the LES Safety Program and Site Safety Plan. Our safety culture begins with the hiring decisions made in staffing our teams and continues through each phase of development, construction and operation of our projects.

All new employees must complete Longroad's onboarding safety training before reporting to their duties. We continually update our employee safety training. Annual safety refresher training of all site employees is accomplished through monthly or as-needed safety meetings, tailgate meetings, and formal training sessions. Topics reviewed in these sessions include high voltage work, electrical safety, arc flash protection and live work. Some other areas of training are confined space entry, environmental considerations, CPR/first aid, forklift safety, crane safety, safe lifting practices and safe driving.

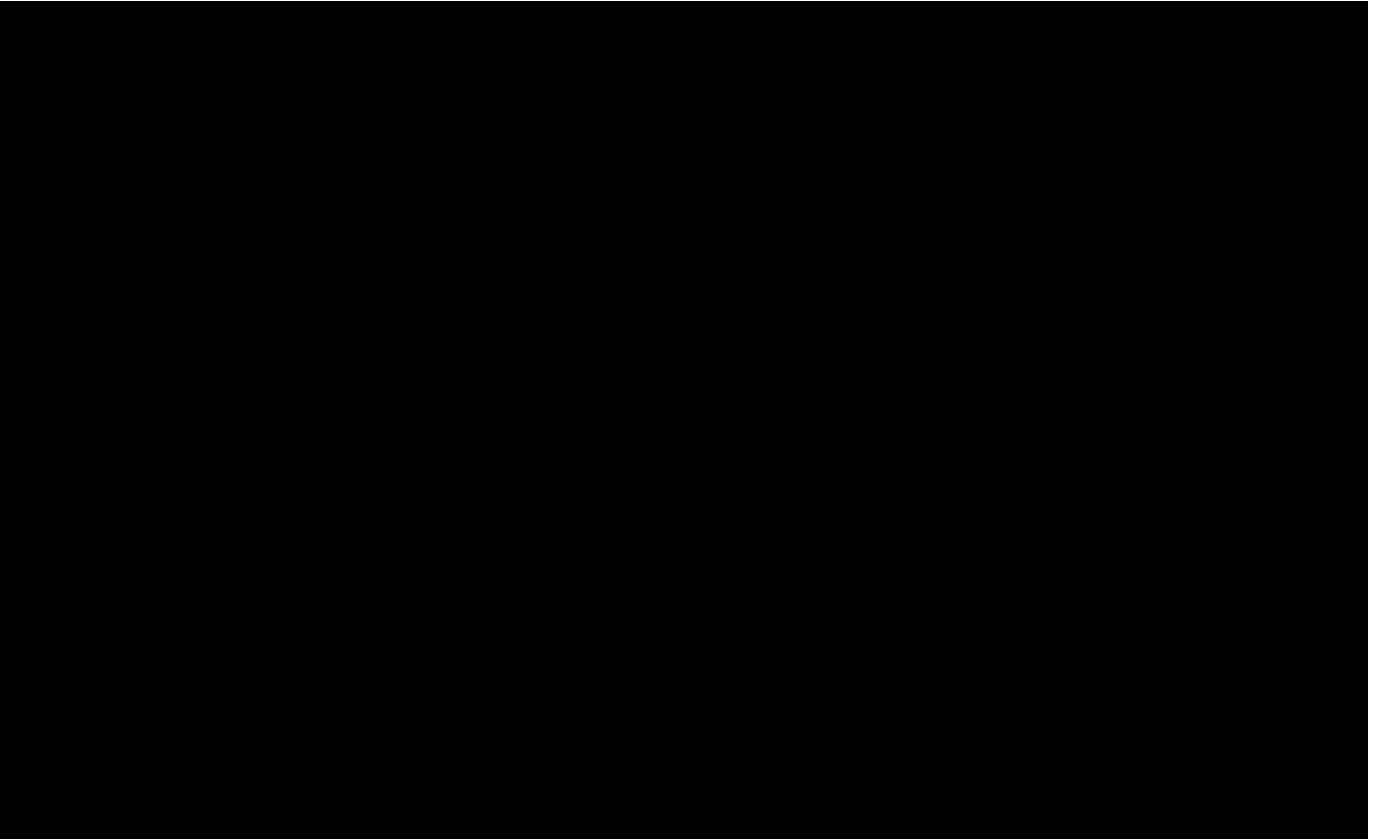
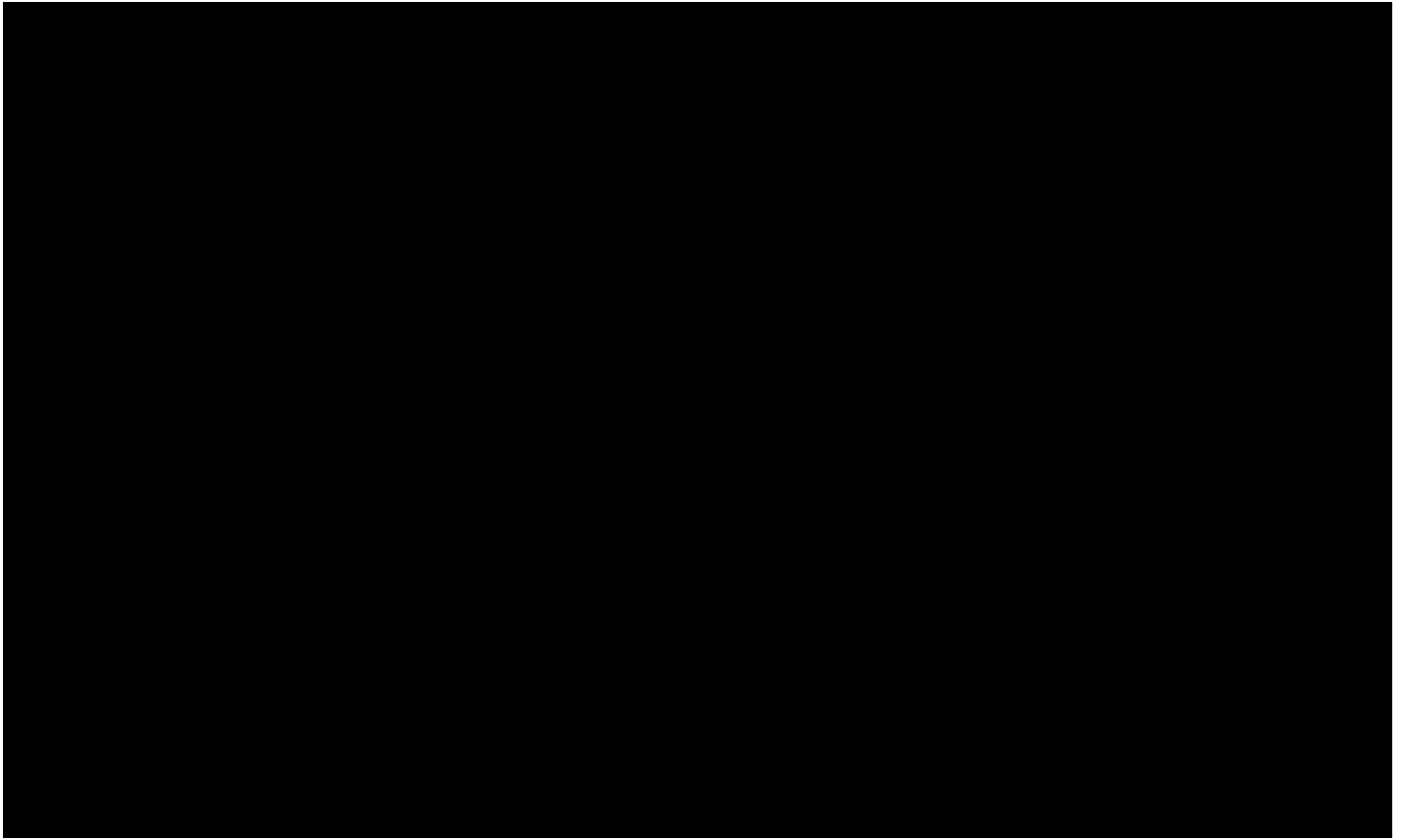
Staffing Plan

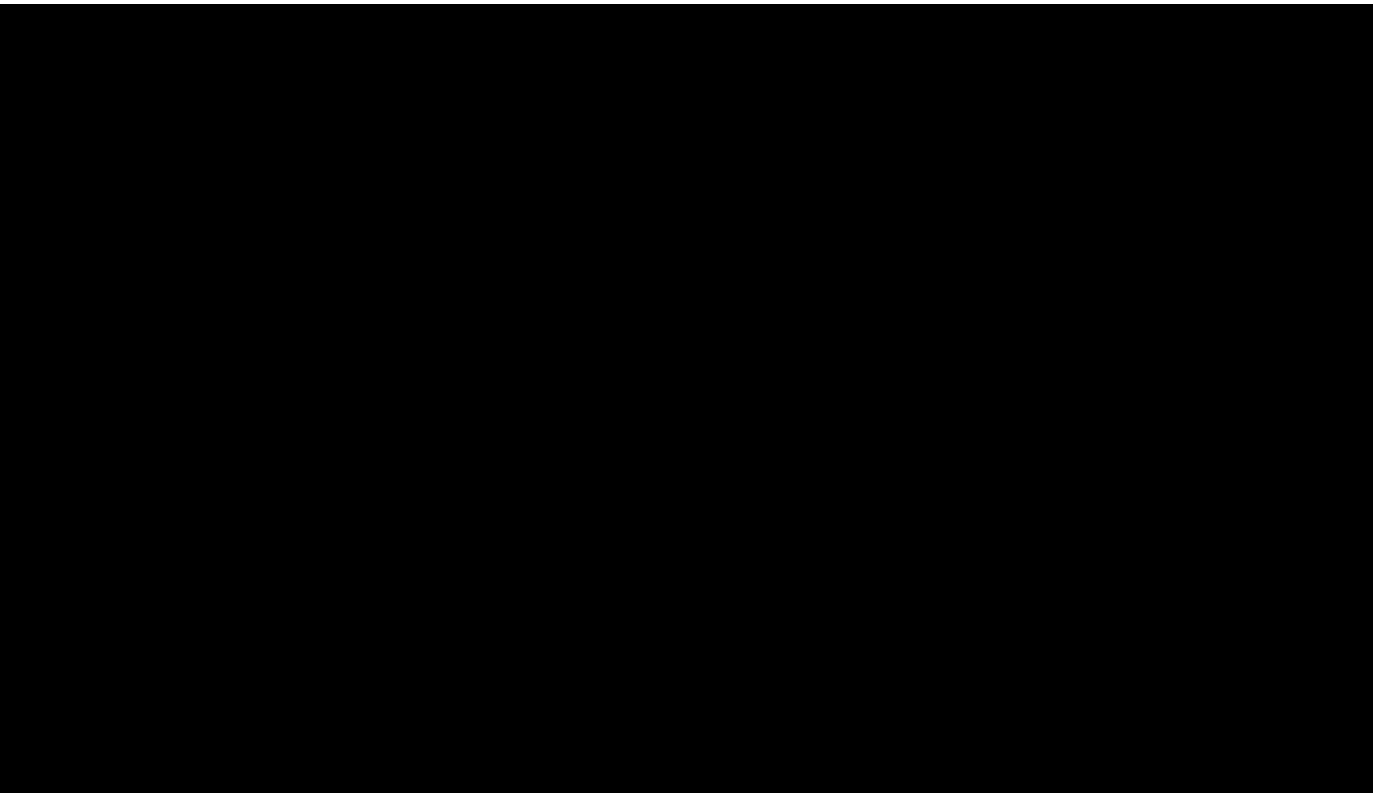
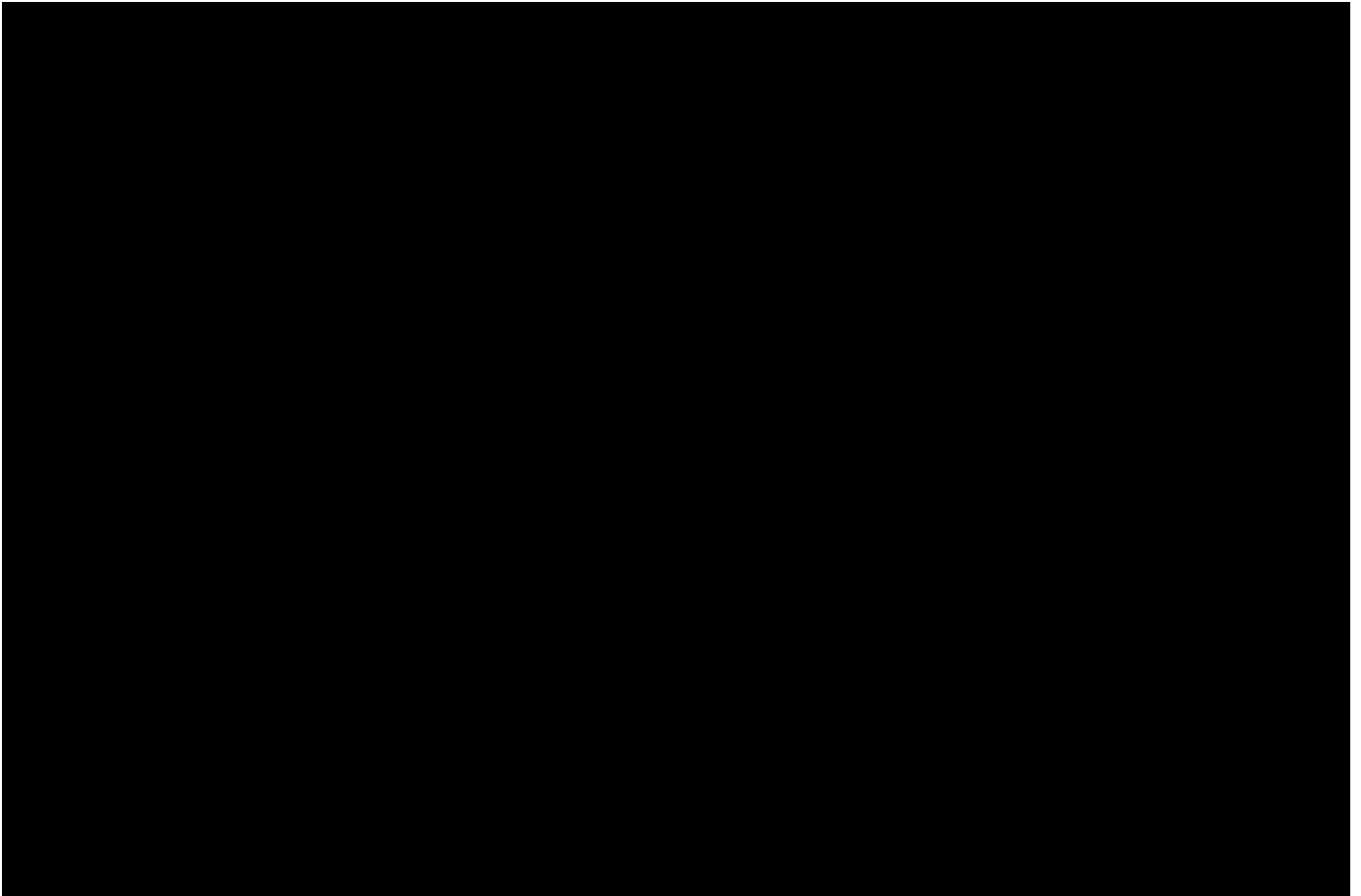
The project direct staff will include one Asset Manager, one Regional Operations Manager, one Lead Technician, two to three O&M technicians and one to two BOP technicians who will report to the Vice President of Asset Management and Vice President of Operations. The final number of O&M and BOP technicians will be finalized well in advance of construction start and will be based on project complexity, proximity to other Longroad projects and expected use of surge labor. The Lead Technician will be hired at least ninety (90) days prior to COD and the O&M and BOP technicians will be hired thirty (30) to sixty (60) days prior to COD to complete onboarding training and take part in final project commissioning. On-site staff will be augmented by additional technicians during preventative maintenance cycles to complete work quickly and efficiently.

Maintenance Plan

The following maintenance schedule will be reviewed with the major equipment manufacturers and be updated as required to maintain warranty, optimize performance and comply with recommended operations and maintenance procedures. Please note that this is indicative of the maintenance plan we would implement for a plant of this size, and is subject to further adjustment before COD.

Preventive Maintenance - PV Array & Equipment





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

O&M activities will be funded from an operating expense budget, consistent with Longroad's approach and experience from other operational projects. Longroad 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.

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.

Longroad sources field-proven components from financially stable vendors. Longroad has entered into framework relationships with key component vendors to obtain competitive pricing and to ensure that we can procure an adequate supply of panels and inverters. The following are indicative terms of the warranties for major equipment:

- Solar Modules: [REDACTED],
- Inverters: [REDACTED]

- Racking: [REDACTED]
- Major BOP equipment (substation, transformer) and pad mount transformers: (at least) [REDACTED]

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.

Ancillary O&M services agreements will be sourced and negotiated as final specifications are engineered and definitive supply agreements for the Project's major equipment are executed.

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

The Longroad team is an experienced O&M manager of both large-scale solar and wind projects with over 2.5 GW of operating assets under management during their tenure at First Wind and SunEdison. The Longroad team has developed and operated wind projects ranging in size from 15 to 200+ MW located in diverse environments. This range of experience provides a deep institutional knowledge base for project design, construction and commissioning, ongoing troubleshooting, and optimized project performance. Wind projects the Longroad team developed and subsequently operated from their COD to 2016 include the following:

- Kaheawa I and II, HI - in operation since 2006 and 2012 respectively
- Mars Hill, ME - in operation since 2007
- Steel Winds I and II, NY - in operation since 2007 and 2012 respectively
- Cohocton, NY - in operation since 2009
- Stetson, ME - in operation since 2009
- Milford I and II, UT - in operation since 2009 and 2011 respectively
- Stetson II, ME - in operation since 2010
- Kahuku, HI - in operation since 2011
- Sheffield, VT - in operation since 2011
- Rollins, ME - in operation since 2011
- Bull Hill, ME - in operation since 2012
- Kawaihoa, HI - in operation since 2012
- Palouse, WA - in operation since 2012
- Route 66 I, TX – in operation since 2015
- South Plains I, TX – in operation since 2015
- Oakfield, ME – in operation since 2015

**Section 10 of Appendix B to the RFP:
PROJECT SCHEDULE**

A bidder must demonstrate that its proposal can be developed, financed, and constructed and be technically viable within a commercially reasonable timeframe. The bidder is required to provide sufficient information and documentation that shows that the bidder's resources, process and schedule are adequate for the acquisition of all rights, permits and approvals for the project and for the financing of the project consistent with the proposed project milestone dates.

For Eligible Generation Facilities or Transmission Projects that are not yet in-service, bidders are required to provide a complete critical path schedule for the project from the notice of selection of the project for contract consideration to the start of commercial operations. For each project element, list the start and end date.

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..

A detailed Gantt and critical path schedule for the Project is provided as Appendix 10.

10.2) Detail the status of all critical path items, such as receipt of all necessary siting, environmental, and ISO-NE approvals.

Schedule status of key development scope is profiled in Responses 6.2 (siting), Responses 6.6-6.8 (ISO-NE approvals), Exhibit 7.1 (environmental), and Appendix 10 (dependencies).

**Section 11 of Appendix B to the RFP:
PROJECT MANAGEMENT/EXPERIENCE**

Bidders are required to demonstrate project experience and management capability to successfully develop (for a project that includes new facilities or capital investment) and operate the project proposed. The Distribution Companies are particularly interested in project teams that have demonstrated success in projects of similar type, size and technology and, for projects that include new facilities or capital investment, can demonstrate an ability to work together effectively to bring the project to commercial operation in a timely fashion.

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

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.

Through the successful development of First Wind projects, the Longroad team has an established service and supply chain utilized to construct 664 MW of renewable energy projects in New England to the highest industry standards. This 300+ company supply chain utilized by the Longroad team in Maine and New England has been anchored by [REDACTED] which has served as General Contractor on several prior First Wind projects. [REDACTED]

The Longroad team has also contracted with and maintains strong ties to specialized renewable energy contractors [REDACTED] on the implementation of utility-scale wind and solar projects in other regions of the U.S. Specifically, the Longroad team has developed and constructed 320 MW of operational utility scale solar facilities with [REDACTED]

Longroad is currently in discussions with major equipment manufactures about the specifications of this Project and has received indicative EPC bids from highly capable EPC contractors and Tier 1 manufacturers (the latter, described in Section 8)

A complete list of projects implemented by the Longroad team is provided in Exhibit 11.5.

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.

N/A - The 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).**

Over the last decade, the team assembled by Longroad to develop this Project has a track record of large-scale renewable energy development in New England that is without equal. Particularly relevant to this solicitation is the fact that this team is responsible for a significant majority of the capacity that has been successfully developed and put into operation under the previous Section 83 and 83A procurements. The core of the former First Wind executive and development team has been largely reconstituted within Longroad, with individuals that have years of experience in developing, financing, owning, and operating New England wind and solar projects similar to that being offered in this bid. Additionally, Longroad has retained outside consultants and renewed affiliations with key contributors (legal, environmental permitting, interconnection, EPC, finance, community relations, etc.) to these previous successes.

Exhibit 11.4-1 – Longroad Executive Team

Team Member	Qualifications	Job Scope
Paul Gaynor <i>Chief Executive Officer</i>	SunEdison: EVP, Global Utility Development First Wind: Chief Executive Officer Noble Power Assets: CFO Singapore Power: CFO PSG International: CFO GE Capital: VP, Underwriting	SunEdison: Delivered 2.1 GW in 2015 development deals across the globe First Wind: Co-founder, focused on strategy, capital raising, capital allocation, development, counterparty management, board member
Michael Alvarez <i>Chief Operating Officer</i>	SunEdison: SVP, Global EPC First Wind: President, Chief Financial Officer	SunEdison: Responsible for Global EPC, Global Asset Management, plus IT and Facilities

Section 83D RFP Application – Three Corners Solar Project

	Edison International: VP, Strategic Planning Nexant, Inc.: COO and CFO PSG International: Project Director, TransCaspian Gas Pipeline	First Wind: Managed all Construction, Operations, HR, IT, Development, and Financing for the company
Pete Keel <i>Chief Financial Officer</i>	SunEdison: CFO, Global Utility Development First Wind: SVP, Treasury and Finance GE Capital: AVP, Underwriting	SunEdison: Led global structured finance org, raised \$2.5 B in financings to support 3 GW plan First Wind: Led financing, accounting, planning, treasury, tax and risk functions
Charles Spiliotis <i>Chief Investment Officer</i>	SunEdison: VP, Strategy and M&A First Wind: VP, Corporate Development and Project Finance State Street Corp: Associate, Institutional Asset Management and Services	SunEdison: Led M&A effort for high-growth global development platform, including acquisition of more than 2 GW of operating and development assets First Wind: Led corporate development and strategic planning, executed more than \$7 B in structured financing transactions across the capital structure

Exhibit 11.4-2 – Project Team

Role	Prior Employment	Job Scope
Matt Kearns <i>Chief Development Officer and Three Corners Solar Developer</i>	SunEdison: VP, Global Utility Development, North America First Wind: VP, Development East Tetra Tech: Director of Renewable Energy Services NextEra: Permitting and Development	SunEdison: Led development teams to finish development and support financing and construction of ~1 GW of solar projects and 500 MW of wind projects First Wind: Led development teams in the eastern US to complete over 700 MW of wind and solar projects
Jed Dailey <i>VP, Construction at Longroad Energy</i>	SunEdison: VP, Construction West First Wind: VP, Construction West M.A. Mortenson Company: Project Manager, Wind Energy	SunEdison and First Wind: Successfully led the construction management of over 1 GW of utility-scale wind and solar projects
Tom Mulcahy <i>Director, Solar Engineering & Design at Longroad Energy</i>	SunEdison: Manager of Global GIS First Wind: Manager of Solar Resource The Cadmus Group Inc: Senior Environmental Analyst	SunEdison: Developed in-house enterprise technologies to support site diligence and energy modeling for utility-scale and distributed generation solar projects First Wind: Managed the Engineering and Design of First Wind's 500+ MWac solar development pipeline

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Deron Lawrence <i>Director, Natural Resources Permitting and Policy at Longroad Energy</i>	SunEdison: Environmental Permitting Manager, Western US and International CH2M: Project Manager, Technical Lead for Eagle Permitting Group	SunEdison: Managed development and operational permitting and compliance CH2M: Managed wind energy permitting, specializing in USFWS negotiations for eagle permits
Charlie McClelland <i>Director, Transmission at Longroad Energy</i>	First Wind/SunEdison: Transmission Associate, North American Utility Development Cadmus: Associate, Renewable Energy Group, Energy Services Division Wind Energy Center (WEC), University of Massachusetts Amherst: Research Fellow	First Wind/SunEdison: Led transmission and interconnection related activities for over 1GW of wind and solar development projects located throughout the U.S. Cadmus: Performed technical due diligence including power performance, acoustic and visual impact assessment for wind and solar projects located throughout the U.S.
EJ Martin <i>VP, Operations and Maintenance at Longroad Energy</i>	SunEdison: Director of Services, North America First Wind: VP, Operations and Maintenance Lindblad Expeditions: Chief Engineer Hornbeck Offshore: Relief Chief Engineer	SunEdison: Directly oversaw ~200 employees involved in the day-to-day O&M of ~4 GW of wind and solar projects across the U.S. and Canada First Wind: Led O&M team overseeing 1.7 GW of wind assets across US. Managed company's 24/7 monitoring center

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.

Exhibit 11.5 – Select Bidder Team Development Experience

Project(s)	State	Size (MWac)	Technology	COD Year	Offtaker
Kaheawa I	HI	30	Wind	2006	MECO
Mars Hill	ME	42	Wind	2007	New Brunswick Power
Steel Winds I	NY	20	Wind	2008	Morgan Stanley, Just Energy
Stetson I	ME	57	Wind	2009	Constellation Energy
Cohocton	NY	125	Wind	2009	Citibank, NYSERDA
Milford I	UT	203.5	Wind	2009	SCPPA
Rollins	ME	60	Wind	2010	CMP, Bangor Hydro
Stetson II	ME	25.5	Wind	2010	Harvard University
Kahuku	HI	30	Wind	2010	HECO
Sheffield	VT	40	Wind	2011	BEC, VECO, WECO
Milford II	UT	102	Wind	2011	SCPPA
Bull Hill	ME	34.5	Wind	2012	NSTAR (Eversource)
Steel Winds II	NY	15	Wind	2012	NYSERDA
Palouse	WA	105	Wind	2012	AVISTA
Kaheawa II	HI	21	Wind	2012	MECO
Kawailoa	HI	69	Wind	2012	HECO
Millbury	MA	4	Solar	2013	SREC/Muni. net metering
Warren	MA	17	Solar	2013	SREC/Muni. net metering
Oakfield	ME	148	Wind	2015	Eversource, National Grid
Route 66 I	TX	150	Wind	2015	Morgan Stanley
South Plains I	TX	200	Wind	2015	Morgan Stanley
Seven Sisters	UT	20	Solar	2015	PacifiCorp
Bingham	ME	185	Wind	2016	Eversource, National Grid
Hancock	ME	51	Wind	2016	MMWEC, Burlington Electric
South Plains II	TX	150	Wind	2016	HP, Citibank
Four Brothers	UT	320	Solar	2016	PacifiCorp

The Longroad team was responsible for development, financing, construction, commissioning, and in some cases, an operational period of the above listed projects. These projects were sold and/or assigned to Terraform or other long-term asset owners after the acquisition of First Wind by SunEdison. Therefore, Longroad does not control nor have operational data for these facilities.

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
- ii. Operating Period Lender and/or Tax Equity Provider, as applicable
- iii. Financial Advisor
- iv. Environmental Consultant
- v. Facility Operator and Manager

- vi. Owner's Engineer**
- vii. EPC Contractor (if selected)**
- viii. Transmission Consultant**
- ix. Legal Counsel**

Construction Period and Operating Period Lenders, if any:

While specific lenders have not yet been selected for the Project, prior lenders for the Longroad team's projects include, but are not limited to RBS, Key Bank, Union Bank, Nord LB, Rabobank, HSH Nordbank, Banco Santander, Bayern LB, Deutsche Bank, CIT, Siemens Financial, CoBank and Commerzbank.

Tax Equity Providers, as applicable:

While a tax equity partner has not yet been selected for the Project, prior tax equity providers for the Longroad team's projects include JPMorgan, Credit Suisse, US Bank, Citi, MUFG, Goldman Sachs, Morgan Stanley, MidAmerican, and Wells Fargo.

Financial Advisor:

Longroad's in-house finance group manages financial planning, analysis, and risk assessment activities.

Environmental Consultants:

██████████ has served as the lead consultant on permitting and resource surveys for prior projects managed by the Longroad team.

Owner's Engineer:

Longroad has utilized a number of engineering firms, including SGC Engineering and GL Garrad Hassan. James W. Sewall Company, TRC, Deluca-Hoffman Associates, Inc. and SGC Engineering have also provided civil engineering services to Longroad projects.

EPC Contractor (if selected):

██████████ has constructed all of Longroad's Maine projects to date; Longroad has also contracted with ██████████ to build solar energy facility construction projects in other locations in the U.S.

Transmission Consultant:

The electrical engineering firms Longroad has utilized in the past and under consideration for the Project include TRC, SGC Engineering, RLC Engineering and CHA.

Legal Counsel:

Longroad's in-house legal organization provides legal support. Outside legal counsel for certain development matters and project financing has not yet been selected.

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.

The Solar SPV will be the Lead Market Participant for the Project. Longroad will provide the staffing and expertise to support the Project's participation in ISO-NE. Longroad employs market experts that have participated in ISO-NE markets on behalf of wind, solar and natural gas facilities. Longroad staff is familiar with ISO-NE's day-ahead, real time, ancillary services and capacity markets.

Section 12 of Appendix B to the RFP: 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.

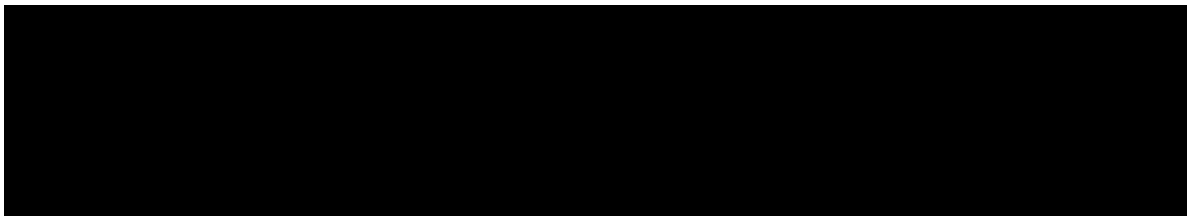
For new generation facilities, provide emissions estimates based on available data from the unit manufacturer. Alternatively, provide actual emissions data determined in accordance with the paragraph above for a similar facility built within the past 3 years. Include copies of supporting documentation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

Project Anticipated Emissions, expressed in pounds/megawatt-hour (lbs/MWh)

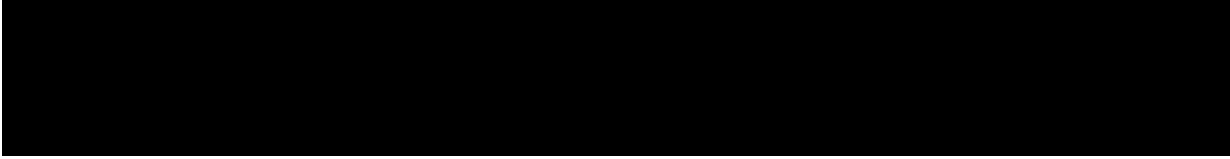
Source of Information	Date of Test (if applicable)	Greenhouse Gases (all except methane) Expressed as Carbon Dioxide equivalent (CO ₂ e)	Nitrogen Oxides (NO _x)	Sulfur Oxides (SO _x)	Carbon Monoxide (CO)	Particulate Matter (PM _{2.5})	Methane (CH ₄)
N/A	N/A	0	0	0	0	0	0
N/A	N/A	0	0	0	0	0	0

The proposed Project utilizes solar modules, a renewable resource and generation technology which does not emit any air pollutants. Rather, as an “as-available” resource within ISO-NE’s pooled generation and transmission control area, the Project will offset generation and associated pollution from regional resources at a rate approximately equivalent to [*Project Annual Estimated Generation X NPCC New England Emissions Rates*]⁶:

Exhibit 12.1 – Project’s Estimated Annual Pollution Avoidance



⁶ Environmental Protection Agency’s eGRID 2014 results, Version eGRID2014v2.

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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:





- NO_x – Selective/Non-Selective Catalytic Reduction
- SO_x – 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.

The Project does not have associated sources of emissions, and therefore has not made such investments.

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.

The intent of the Baker Administration in proposing, and the Legislature in passing, the law providing the authority for this solicitation (*An Act to Promote Energy Diversity*) was, in part, to help the Commonwealth meet its targets under the GWSA. These targets became even more important after the Kain decision was handed down by the Supreme Judicial Court last summer, which held that the 2020 greenhouse gas limits under the GWSA are binding.

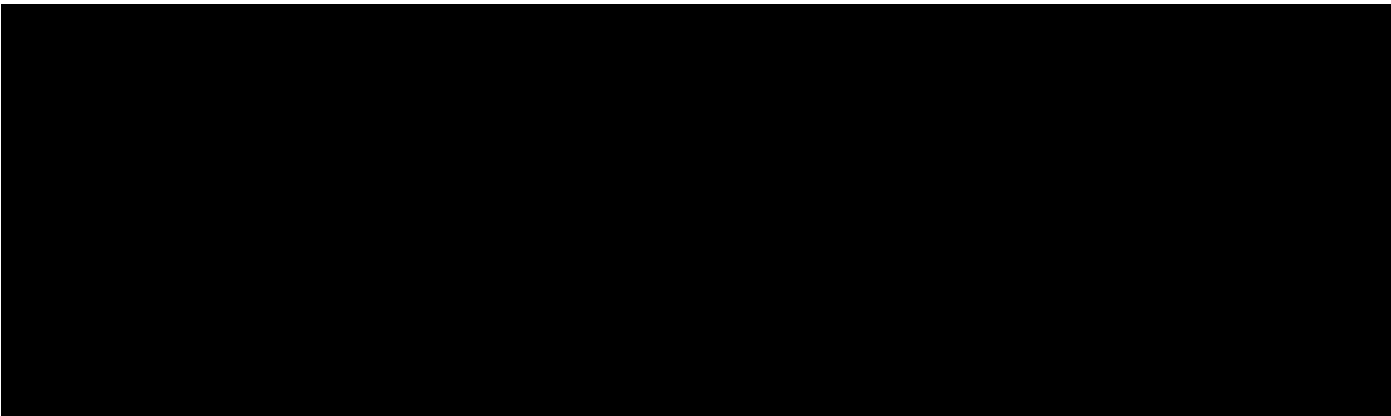
This Project would help the Commonwealth achieve the 2020 emission target by providing  of emissions-free electricity annually starting in  and the Project will displace  tons of carbon dioxide equivalent emissions annually,⁷ and thus help the Commonwealth meet both short- and long-term GWSA goals over its useful  operating life. In so doing, this Project will help fulfill the objective of the RFP in terms of assisting the Commonwealth in meeting its climate targets.

⁷ Subject to the degradation schedule described in Section 4 and CPPD profile.

Section 13 of Appendix B to the RFP:**CONTRIBUTION TO EMPLOYMENT AND ECONOMIC DEVELOPMENT AND OTHER DIRECT AND INDIRECT BENEFITS**

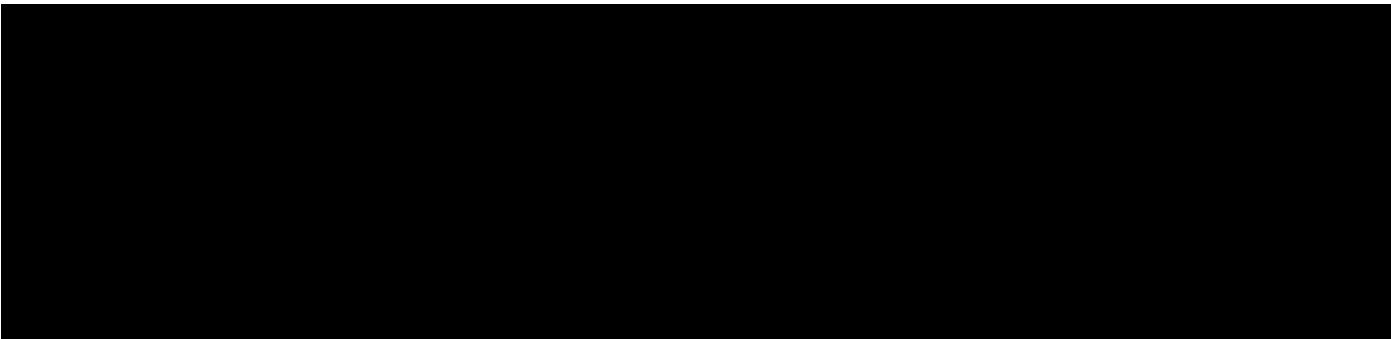
13.1) Please provide an estimate of the number of jobs to be created directly during project development and construction (for a project that includes new facilities or capital investment), and during operations, and a general description of the types of jobs created, estimated annual compensation, the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

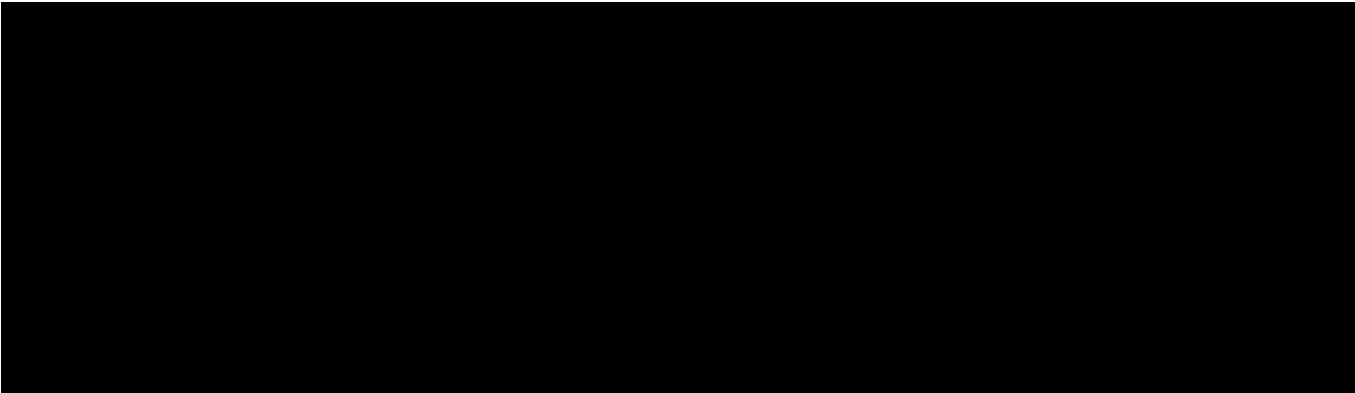
Values presented below are based on a combination of 1) Longroad's experience with developing, constructing and operating projects of a similar scope and scale in this region, 2) input/indicative bids from local construction partners in the Northeast about this Project, and 3) results from NREL JEDI Model simulations.

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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.

Values presented below are based on a combination of 1) Longroad's experience with developing, constructing and operating projects of a similar scope and scale in this region, 2) input/indicative bids from local construction partners in the Northeast about this Project, and 3) results from NREL JEDI Model simulations.

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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.

Ratepayer benefits

The purpose of the Project, and its primary economic benefit, is the delivery of reliable, cost-effective renewable energy and capacity which lowers the cost of wholesale power in ISO-NE and RPS compliance for the Distribution Companies, the Commonwealth and its ratepayers. Particularly relevant to this Project is the fact that the Bidder is responsible for a significant majority of the capacity that has been successfully developed and put into operation under the previous Section 83 and 83A procurements. The Massachusetts Department of Public Utilities Order approving the PPAs for the Oakfield Wind and Bingham Wind projects developed by the Longroad team and selected and now operational under Section 83A estimated nearly \$700 million in “net below market costs” for the contracted products.⁸

Ratepayers will also benefit from additional solar energy and capacity in the form of protection against fuel price increases. Predictable, long-term wholesale contracts for solar are delinked from volatile fuel markets and provide a known cost to ratepayers, compared to gas or coal, which fluctuate with fuel prices. Eliminating the worst-case scenarios for energy costs to the region is a significant economic benefit.

Labor and Employment

As a major capital project, the development, construction and operation of the facility will initiate or support significant full-time and part-time employment, with estimates for direct and indirect employment impacts described in Section 13. Outside of the major hardware and equipment sourced for the Project, a majority of the services supply chain (consultants and/or subcontractors) required for development and construction will be sourced from New

⁸ MA DPU Order: <http://170.63.40.34/DPU/FileRoomAPI/api/Attachments/Get/?path=13-146%2f13-146-Order-9561.pdf>

England and local businesses, resulting in a multi-million dollar investment in the regional economy.

Lease and Taxes

The operating expense budget and forecast for the Project will make steady contributions to local parties in the form of leases to landowners, property taxes to the jurisdictional authorities and maintenance contracts for local businesses. Longroad's independent tax analysis for the Project forecasts an average contribution of [REDACTED] year to the local Towns.

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.

Such factors have been addressed in Section 7 and Section 13.

13.5) Describe how your project will (a) contribute to reducing winter electricity price spikes in Massachusetts, and (b) guarantee energy delivery in winter months. Class I RPS eligible projects must guarantee that 70% of energy in their delivery profile of the Winter Peak Period will be delivered over the course of every Winter Peak Period (see Section 2.2.2.7). 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, will be required to submit a delivery profile with no Winter Peak Period hour less than 60 percent (60%) of their highest annual single hourly delivery claimed in their annual delivery profile.

The Project will suppress wholesale market prices and will moderate system peak load during the winter period with fixed price generation and capacity as described in Section 3.4. When the Project is generating, it will displace expensive natural gas fired units, which operate on the margin and often set the market clearing price in ISO-NE. The displacement of relatively inefficient natural gas generation from the supply stack reduces the impact high natural gas prices have on electricity prices in ISO-NE, thus saving money for ratepayers. The Project has provided a winter guarantee production profile consistent with the requirements of the RFP and CPPD forms. The Project has budgeted capital expense and operating budget reserves for a robust O&M plan designed for winter weather and contingencies and maximizing availability.

13.5) 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.

The economic benefits the Project provides to low-income ratepayers includes (i) the cumulative impact of wholesale market price suppression, (ii) cost effective RPS compliance and (iii) a hedge to volatile natural gas prices, which drive electricity prices in New England.

Section 14 of Appendix B to the RFP:**ADDITIONAL INFORMATION REQUIRED FOR TRANSMISSION PROJECTS (AND ALL SYSTEM UPGRADES ASSOCIATED WITH PROPOSED TRANSMISSION PROJECTS)**

Note: Three Corners Solar will utilize the existing transmission grid and is not bidding as or with an associated new transmission project for the purposes of this RFP; Section 14 in its entirety is not applicable to the Three Corners Solar bid.

Bids that include Transmission Projects (and all System Upgrades) must also provide the following information:

14.1 Transmission Project Information:

- i. Overall project description
- ii. The operating voltage of the proposed project
- iii. The type of structures (such as steel towers or poles) that would be used for the proposed project
- iv. The length of the proposed transmission line and the type(s) of terrain and land ownership of the proposed ROW
- 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.
- 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:
 - i. 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.
 - ii. 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.

- iii. Describe the proposed financing sources and instruments.
- iv. 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.
- v. 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).
- 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.
- 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; and
 - j. Other items identified by the bidder.

- 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.

N/A

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.
- ii. List all situations which may change the proposed payments by consumers during the contract term.
- iii. Identify any limits placed upon the bidder's post-contract term rates according to current FERC rules.
- iv. 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.
- v. 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 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.
- vi. 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.

- vii. If the pricing proposed is based on 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.
- 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.
- 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 Capability Interconnection Standard and to ensure full dispatch, including transmission upgrades that may need to occur beyond the point of interconnection.
- 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.
- xi. Please describe your approach to avoid line losses.

N/A

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.

N/A

14.4) The design life of the project.

N/A

14.7) A description of the reliability benefits of the proposed Transmission Project and its impact on existing transmission constraints.

N/A

**Section 15 of Appendix B to the RFP:
EXCEPTIONS TO FORM PPA AND OR VARIATIONS FROM THE PROPOSED TARIFF
REQUIREMENTS**

Please attach an explanation of any exceptions to the Form PPAs set forth in Appendix C-1 or Appendix C-2 to this Notice, including any specific alternative provisions in a redline format to the Form PPA.

A redline of the Form PPA (Appendix C-1 of the RFP) is provided by appendix.

Index to Appendix

Number	Item	Note
CPPD Form	Project and Pricing Information	
Appendix D	Bid Certification Form	
Appendix 4.1.i	TMY 8760 Reference	Confidential Version Only
Appendix 4.1.ii	Three Corners Solar P50 Net Energy Output 12x24	Confidential Version Only
Appendix 5.2.i	██████ Letter of Interest	Confidential Version Only
Appendix 5.2.ii	██████ Letter of Interest	Confidential Version Only
Appendix 5.5	Longroad Energy Holdings Financial Statements	Confidential Version Only
Appendix 6.2	Lease Options	Confidential Version Only
Appendix 6.7	Enhanced Feasibility Study	Confidential Version Only
Appendix 6.8	CCIS Assessment	Confidential Version Only
Appendix 6.10	Three Corners Solar Electrical Models	Confidential Version Only
Appendix 6.11	Three Corners Solar One Line Diagram	Confidential Version Only
Appendix 6.15	Three Corners Solar Congestion Study	Confidential Version Only
Appendix 7.4.i	██████████ Letter of Support	
Appendix 7.4.ii	MREA Letter of Support	
Appendix 10	Three Corners Solar Gantt Project Schedule	Confidential Version Only
Appendix C-2 (15)	Redline to Form PPA	Confidential Version Only



Section 83D RFP Application – Three Corners Solar Project