NEW HAMPSHIRE SITE EVALUATION COMMITTEE

CHINOOK SOLAR, LLC APPLICATION FOR A CERTIFICATE OF SITE AND FACILITY

DOCKET NO. 2019-02

Submitted by:

Chinook Solar, LLC
700 Universe Boulevard
Juno Beach, FL 33408

Prepared by:

TRC
14 Gabriel Drive
Augusta, ME 04330

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See Cover letter

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List of Acronyms

AC	alternating current
AoT	Alteration of Terrain
APE	area of potential effects
BMPs	best management practices
Certificate	Certificate of Site and Facility
Chinook Solar	Chinook Solar, LLC
dBA	decibel A-weighted
DC	direct current
EPC	Engineering Procurement and Construction
ESC	erosion and sediment control
Eversource	Eversource Energy
FPL	Florida Power and Light Company
FTE	full-time equivalent
GPS	Global Positioning Systems
ISO-NE	Independent System Operator – New England
kV	kilovolt
LCA	Life Cycle Assessment
LLC	limited liability company
MOU	Memorandum of Understanding
MW	megawatt
National Grid	National Grid plc
National Register	National Register of Historic Places
NEC	National Electrical Code
NEECH	NextEra Energy Capital Holdings, Inc.
NEER	NextEra Energy Resources, LLC
NESC	National Electrical Safety Code
NextEra	NextEra Energy, Inc.
NH	New Hampshire
NHDES	New Hampshire Department of Environmental Services
NHDES Solar Guidance	NHDES Alteration of Terrain Bureau Stormwater Guidance for Large Scale Solar Arrays (January 2019)
NHDHR	New Hampshire Division of Historical Resources
NHDOS	New Hampshire Department of Safety
NHEC	New Hampshire Electric Cooperative
NHF&G	New Hampshire Fish and Game Department
NHNHB	New Hampshire Natural Heritage Bureau
OSHA	Occupational Safety and Health Administration
PAL	Public Archaeology Lab
PILOT	Payment in Lieu of Taxes
Project	Chinook Solar Project
ROCC	Renewable Operating Command Center
ROW	right-of-way
SEC	Site Evaluation Committee
SPCC Plan	Spill Prevention, Control, and Countermeasures Plan
S-ROI	Sustainable Return on Investment
SWRPC	Southwest Region Planning Commission
U.S.	United States
USACE	United States Army Corps of Engineers
USEPA	United States Environmental Protection Agency

USFWS	United States Fish and Wildlife Service
USFWS Guidelines	Range-wide Indiana Bat Summer Survey Guidelines
VIA	Visual Impact Assessment

EXECUTIVE SUMMARY

Chinook Solar, LLC (Chinook Solar or the Applicant) submits this Application to the New Hampshire Site Evaluation Committee (SEC) for a Certificate of Site and Facility (Certificate) to construct and operate the Chinook Solar Project (Project) in the Town of Fitzwilliam, Cheshire County, New Hampshire (Fitzwilliam). Provided below is a summary of the contents of the Application and appendices, including information about the Applicant, the site, the proposed facility, and potential social and environmental effects. This Application is the product of several years of study, outreach, and engineering development work.

The Project is a planned 30-megawatt (MW) solar energy generation facility consisting of solar panels and associated civil and electrical infrastructure. The Project will be located on privately-owned parcels to be purchased or leased by Chinook Solar. The Project is sited on actively harvested forest lands adjacent to two transmission line corridors; therefore, no new transmission lines will be necessary to deliver the Project's renewable energy to the New England electric grid – precluding potential impacts associated with the construction of new transmission lines. The Project has direct access to Fullam Hill Road via an existing private road and will utilize existing logging roads within the Project area to the greatest extent possible, thereby resulting in only 12,000 feet of new Project access roads.

The Project is consistent with and advances several important local and regional public policy goals, such as those contained in New Hampshire's renewable portfolio standard law, RSA 362-F, which requires 25% of electricity sold by retail suppliers in New Hampshire to come from renewable sources by 2025. The Project will provide significant regional clean energy and fuel diversity benefits using a renewable resource, sunlight. The Project also supports the Regional Greenhouse Gas Initiative, RSA 125-O:20-29, and the Fitzwilliam Master Plan by generating electric energy without greenhouse gas emissions.

Chinook Solar and Fitzwilliam anticipate developing a Memorandum of Understanding (MOU) to outline and define the Project's commitments with Fitzwilliam, in addition to a Payment in Lieu of Taxes (PILOT) agreement. These agreements are intended to clearly document Chinook Solar's intent to build a strong relationship with the hosting community.

Applicant Information

Chinook Solar, a Florida-based Delaware limited liability company (LLC) registered to do business in New Hampshire with the New Hampshire Secretary of State, proposes to permit, construct, and operate the Project in the Town of Fitzwilliam, Cheshire County, New Hampshire. Chinook Solar is an indirect, wholly owned subsidiary of NextEra Energy Resources, LLC (NEER). NEER's parent company, NextEra Energy, Inc. (NextEra), is the largest wholesale generator of renewable electric power in North America.

NextEra has been involved in the renewable energy industry for over 30 years, and NEER is a leading clean energy company with approximately 20,700 MW of net generating capacity in operation. NEER produces most of its electricity from clean and renewable sources and is the global leader in producing electricity from the wind and sun, with over 13,000 MWs fueled by wind energy and over 2,300 MWs from solar energy. This extensive experience in renewable energy ownership, construction, operation, and management demonstrates that Chinook Solar has the financial, managerial, and technical capabilities needed for the successful construction and operation of the Project.

NEER will provide the capital needed for construction and operation of the Project. NextEra is one of the leading clean energy companies in the United States (U.S.), with consolidated revenues of approximately $16.7 billion. NextEra has planned infrastructure investments in the U.S. of over $28 billion through 2022. NextEra has the capability to provide financial assurances, guarantees, financing, and insurance for the Project's development, construction, and operation. The Project's financial requirements will be met through capital funding from its indirect corporate parent, NextEra Energy Capital Holdings.

Regulatory Framework

NEER has a proven track record of bringing large-scale solar projects through permitting, construction, and ultimately delivering power to market. The Chinook Solar Project team brings these capabilities along with local, New Hampshire-based regulatory and natural resources expertise to support the development of this Project within the regulatory framework set by the SEC. This Application meets or exceeds the regulatory requirements set forth by the SEC, as well as the New Hampshire Department of Environmental Services (NHDES). Chinook Solar has also made a concerted effort to ensure the Project is compatible with Fitzwilliam zoning ordinances.

Project Site

The Project land control area consists of approximately 513 acres in a sparsely populated rural area in the eastern portion of Fitzwilliam. The location of the Project is south of New Hampshire (NH) State Route 119, east of NH State Route 12, and west of Fullam Hill Road. Directly east of the Project and west of Fullam Hill Road is a transmission corridor comprised of a 345-kilovolt (kV) electric transmission line owned by Eversource Energy (Eversource), along with a separate corridor containing two 115-kV electric transmission lines, both owned by National Grid plc (National Grid). The Project will connect to the electric grid via one of the 115-kV electric transmission lines.

The Project site is comprised of undeveloped forest lands that have been subject to timber harvesting over the past several decades. The Project site was selected due to its proximity to the transmission corridor, suitability of uplands, and local interest by landowners to sell and/or lease these parcels for energy development use.

Proposed Project - Solar Facility

Project components include solar panels, pad-mounted transformers and inverters, aboveground and underground collection lines, a Project substation and utility switchyard (collectively, the Substation), and other necessary infrastructure (e.g., access roads with turn arounds and security fencing), as well as short underground conductors necessary to interconnect with the transmission grid. Linear arrays of solar panels aligned in an east to west direction will be mounted on fixed tilt metal racks supported by vertical solar racking piles, driven into the ground; in some areas, screws, rock pins, or other anchoring technologies may be used in lieu of posts, depending on site conditions.

Direct current (DC) electricity, generated by the solar panels, will be routed primarily through underground DC collection lines to the transformers/inverters, with some segments of overhead lines as needed. The inverters and pad-mounted transformers will be located throughout the Project and will convert the DC electricity to alternating current (AC) electricity. From the transformers/inverters, the AC electricity will be routed via 34.5-kV AC collection lines to the Substation. Short underground conductors will loop the existing National Grid 115-kV transmission line into the Substation. The Substation will be located directly southwest of the existing transmission

line corridor and approximately 0.2 mile west of Fullam Hill Road. No new transmission lines will be required for interconnection.

Two 34.5-kV three-phase collection lines will connect the Substation to individual inverters. The collection lines will be in a daisy chain configuration going from one inverter to the next and will terminate at a disconnect structure located in the Substation. The Substation will deliver generated power from the solar arrays via the inverters to the electric grid via short underground 115-kV conductors. The Substation will include a main power transformer that will increase the collection system voltage of 34.5-kV to transmission voltage at 115-kV.

Chinook Solar has participated in extensive and ongoing discussions with National Grid and the Independent System Operator - New England regarding interconnection of the Project. Chinook Solar is also in discussions with Eversource as the short underground 115-kv conductors will also cross the Eversource electric transmission right-of-way.

The Project will include a main site access road and interior access roads between the arrays. The main site access road will be via an existing gravel road located off Fullam Hill Road and this road will also provide access to the Substation. Temporary construction access for southern portions of the Project area will occur via Crane Road, located off NH State Route 12.

Construction of the Project will begin after all required approvals and permits have been obtained and all commercial agreements are finalized. Construction is currently anticipated to commence in November of 2020, though the start of construction will ultimately depend on when the Certificate is obtained. The expected Commercial Operation Date for the Project is October of 2021.

Alternatives Analysis

NEER has extensive experience developing solar projects throughout the U.S. and therefore has established a comprehensive and practical approach for selecting solar project sites. In selecting a project site, NEER considers numerous factors, such as environmental constraints and availability of uplands, slope and aspect required for solar resources, landowner interest, and proximity to grid-interconnection. One of NEER's primary goals when selecting and developing projects is to avoid and minimize natural resource impacts to the greatest extent possible. The Chinook Solar Project site was determined to be a suitable site for the Project and consistent with NEER's goals.

Based on information obtained through field studies of natural and cultural resources, Chinook Solar developed several site-specific solar array design configurations throughout the Project development process. The primary consideration in siting the project was avoidance of natural resources such as wetlands and vernal pools, to the greatest extent possible. The alternatives analysis also included various configurations of solar arrays, different models of panels, different quantities and models of inverters, and numerous access road configurations.

Potential Social and Environmental Effects

Aesthetics

The Project will not result in an unreasonable adverse effect to the aesthetics of the surrounding area. A Visual Impact Assessment (VIA) was conducted for the Project. The VIA included background data collection and identification and classification of scenic resources, followed by viewshed analysis mapping to examine the potential visibility of the Project. The viewshed analysis

was portrayed as two types of viewshed maps: terrain viewshed and vegetated viewshed. Field investigations were conducted to verify areas of potential Project visibility, and photographic simulations were created to help evaluate the potential visual impacts of the Project. In addition, an intercept survey was conducted on the summit of Mount Monadnock, which is located approximately 6 miles north of the Project.

The VIA concluded that Project visibility would be extremely minimal, with no significant visibility within 2 miles of the Project. Other than this limited visibility from Mount Monadnock, only isolated views were identified throughout the remainder of the study area, and the analysis determined the Project would not result in unreasonable adverse impacts to the aesthetics of these areas.

The most likely area of potential Project visibility is from the Mount Monadnock summit and surrounding area. The VIA concluded that the Project will not be a prominent element within these views, and the scope and scale of change in the visible landscape will be low. Distance substantially mitigates potential impacts from Mount Monadnock. The intercept survey found that the Project would not be expected to impact visitors' expectations, enjoyment, or future use of Mount Monadnock.

Archaeological and Historic Sites

The Project will not adversely impact any known archaeological sites. A Phase IA and Phase IB Archaeological Assessment were completed for the Project. The Phase IA assessment included a review of site files and reports, followed by a desktop review to examine precontact period and historic period archaeological sensitivity. This was followed by a walkover survey of the entire Project land control area. Based on these efforts, five general areas with precontact period archaeological sensitivity were identified, along with one area of historic period archaeological sensitivity. A Phase IB Archaeological Assessment was conducted to investigate the archaeologically sensitive portions of the Project's area of potential effects. During the Phase IB field survey, subsurface testing was performed in the precontact period and historic period areas identified during the Phase IA assessment. Based on the Phase IB findings, the Project will not adversely impact any known archaeological sites.

A historic resource evaluation, including a review of all available information about previously identified historic properties, and field studies to evaluate the potential impacts of the Project on historic resources, was completed within a 2-mile survey area around the Project. The historic resource evaluation was performed to provide background on previously inventoried and listed historic properties; discuss historic contexts and associated resource types; and recommend individual properties and/or areas for additional survey. Information collected during the historic resource evaluation was included in a Project Area Form submitted to the New Hampshire Division of Historical Resources (NHDHR). The NHDHR requested an Assessment of Effects analysis for the Fitzwilliam Common Historic District. The results of the Assessment of Effects analysis determined that the Project will not have any direct or indirect effects on the Fitzwilliam Common Historic District.

Based on all the archeological and historic resource evaluation findings, the Project will not adversely impact any archeological or historic resources.

Environment

Air Quality

The Project will not combust any fuels to produce electricity and therefore will not generate any air emissions or have an adverse impact on air quality. As a source of clean, renewable energy, the Project will provide a new power supply to the region without adding any new sources of air pollution or greenhouse gas emissions. Given the Project will not produce any air emissions, unlike electricity produced from fossil fuels, the Project's positive effect with respect to air quality should be considered when balancing facility siting, environmental protection, and public health concerns. Increasing solar energy into the electrical supply system reduces harmful air emissions and results in higher air quality while also helping to reduce the risk of climate change.

Water Quality

The Project will not have any long-term impact on regional water quality, as no water will be withdrawn during the operation of the Project. Potential sources of water quality impacts include short-term effects due to alteration of terrain. The Project has been designed to minimize the likelihood of erosion and subsequent sedimentation, as detailed in the Project design plans and Alteration of Terrain permit application. The Project design incorporates best management practices (BMPs) based on the New Hampshire Stormwater Manual and the NHDES Alteration of Terrain Bureau Stormwater Design Guidance for Large Scale Solar Arrays (January 2019). Erosion and sediment control devices will be monitored frequently to ensure they are working properly, and corrective measures will be promptly if devices are performing inadequately.

Natural Environment

Chinook Solar consulted with the New Hampshire Fish and Game Department (NHF&G), the New Hampshire Natural Heritage Bureau (NHNHB), and the United States Fish and Wildlife Service (USFWS) to identify any documented significant wildlife species or critical habitats in the vicinity of the Project. The NHNHB records identified two species of turtles, one Special Concern species and one state endangered, in the vicinity of the Project. Chinook Solar consulted with the NHF&G to determine appropriate BMPs and conservation strategies to employ during construction and operation to protect turtles. These strategies were included in the Project design.

The USFWS records identified the potential presence of northern long-eared bat, a federally threatened species, in the vicinity of the Project. A summer presence/absence survey was conducted to determine the potential presence of northern long-eared bat. The survey did not detect northern long-eared bat presence within the Project land control area. Chinook Solar consulted with NHF&G to discuss potential Project impacts on bats. As recommended by NHF&G, Chinook Solar will only perform tree clearing activities between November 1 and March 31 to avoid potential impacts to bats. Additionally, the Project has been designed to maintain forested corridors connecting suitable bat foraging habitat.

Based on consultations with the NHNHB, no records of exemplary natural communities or rare plant species occur within the vicinity of the Project. The Project area is comprised of undeveloped forest lands that have been subject to timber harvesting over the past several decades.

Wetland, waterbody, and vernal pool surveys were performed within the Project land control area over several seasons. Wetlands within the Project land control area are predominantly forested, though there are also some scrub-shrub and emergent wetlands that have formed primarily as a

result of timber harvesting activities. Waterbodies within the Project land control area consist of ephemeral and intermittent streams, as well as one perennial stream. Most vernal pools documented within the Project land control area are of unnatural origins, typically located in ruts made by logging equipment. The Project has been designed to avoid all direct impacts to wetlands and waterbodies. The Project will not require a wetland permit from the NHDES.

Public Health and Safety

Chinook Solar is a responsible renewable energy developer and owner, and safety and security are of the highest priority. Safety and security risks are anticipated to be minimal during both construction and operation of the Project, as they have been for other NEER solar energy projects. With experience on more than 30 utility-scale solar projects across North America, NEER puts safety at the forefront of the organization's priorities and as such has a proven record of mitigating safety and security risks year after year.

Project Access, Security, and Safety

Perimeter fencing around the solar panel arrays and the Substation is a safety requirement of the National Electrical Safety Code (NESC) and will prevent the general public from accessing the Project. Access to the Project site will be located off Fullam Hill Road, with gates in the chain-link fence that will be secured with a padlock. Following initial entrance into the Project area via the access road, each area of the Project will be enclosed by chain-link fencing with locking gates to ensure public safety. Upon consultation with local officials and emergency responders, gates may be outfitted with either a "Knox Box" type locking system or daisy chain locking mechanism to allow site access by emergency personnel. In addition, NEER has the Renewable Operations Control Center (ROCC) which has 24/7/365 remote monitoring and operating capabilities from its central control center in Juno Beach, Florida. Should issues arise, central control will dispatch local operations personnel, as necessary.

Signage and labeling requirements are also important safety elements of solar facilities because they alert firefighters or other emergency responders to electrocution hazards from solar facility equipment. Identification, signage, and labeling requirements are specified in detail in the NESC. Chinook Solar will ensure that the Project is properly signed and labeled in accordance with applicable NESC requirements.

Sound

The Project will not produce sound that will unreasonably adversely affect nearby residents or the general public. A comprehensive sound level assessment was conducted for the Project including baseline sound monitoring and acoustic modeling. Baseline sound levels were measured to characterize the existing background sound levels in the area. Under the Fitzwilliam Zoning Code, Commercial and Industrial Noise-Chapter 130 (Noise Ordinance), Fitzwilliam has established a maximum allowable incremental sound increase of 10 decibel A-weighted above ambient. To assess compliance with both the Fitzwilliam and SEC sound limits, the lowest measured ambient sound levels were used in the acoustic modeling analysis. Results of the analysis indicated that the Project will comply with Fitzwilliam's Noise Ordinance and the SEC incremental sound limits.

Decommissioning

A decommissioning plan has been prepared and is included in this Application. All necessary decommissioning activities are addressed in the decommissioning plan. Chinook Solar has also filed a Request to Waive Certain Decommissioning Plan Requirements with this Application.

Emergency Response and Fire Response

Chinook Solar is committed to providing the necessary training to local emergency responders to ensure the safety of emergency service providers servicing the Project and surrounding community. Prior to commissioning of the Project, all electrical equipment will be inspected under rigorous commissioning procedures, as well as by the utilities for grid connection and protection system safety. During operations, qualified personnel will routinely inspect equipment in accordance with preventative maintenance schedules.

Solar panels, located throughout the Project, convert sunlight to electricity. The process involves solid-state technology that consumes no materials and is completely self-contained. As such, the primary concern for first responders is exposure to electrical components that present a hazard to electric shock. There will be very few flammable components associated with the Project; however, the presence of electrical equipment does present a potential fire risk. In the event of a fire, the ROCC will detect equipment faults which will then lead to dispatch of site-personnel to investigate accordingly.

An Emergency Response and Fire Safety Plan has been prepared for the Project, addressing Project-specific safety measures and actions to take in the event of emergency. This plan is included in this Application.

Orderly Development

Chinook Solar engaged an economic expert to evaluate the potential economic effects of the Project by completing a detailed Economic Impact Assessment. The Economic Impact Assessment demonstrated the Project will not have an unreasonable adverse impact on the orderly development of the region with respect to land use, economy of the region, or employment of the region. The Project is consistent with and complimentary to existing land uses, promotes economic development, expands the local tax base, and uses existing infrastructure to the extent possible. Further, the Project will provide a new source of revenue for Fitzwilliam but will not burden the Town with costs typically associated with other forms of development.

Land Use

Impacts on local land use during construction and operation of the Project are expected to be minimal. The Project is sited on previously harvested forest land. While lands under purchase option are not currently planned for timber harvesting during the Project's operation, a forestry management plan may be considered in the future. In addition, developed land may revert back to prior land use following decommissioning. Of the 513 acres under option for purchase and lease, the Project developed area will be limited to approximately 159 acres. The Project anticipates consulting with Fitzwilliam and stakeholders regarding the benefits of potentially placing the non-developed acreage into conservation. Additionally, aside from the Project footprint, local land uses will be able to continue in the same manner as they have for several decades as the Project is compatible with local land uses and development patterns in the surrounding area.

Economy of the Region

The Project is expected to support $18 million in increased economic activity to New Hampshire over the next 20 years. An estimated $10.4 million in added economic value to the overall state economy is anticipated as a result of jobs created for Project construction. During Project operations, jobs created are expected to generate an additional $0.4 to $0.5 million in economic value to the state economy. Further economic value is expected to be added to the state economy as a result of in-state expenditures resulting from the Project. Additionally, state government would benefit from utility related tax payments estimated to be $160,000 annually, and a PILOT agreement payment to Fitzwilliam is estimated to be approximately $300,000 annually.

A real estate analysis was conducted to determine whether the Project would have a negative impact on the region's economy by disrupting the orderly development of the region's real estate markets. Potential impacts of utility-scale solar installations in general, as well as the specific characteristics of the local communities that may be impacted by the Project, were assessed. Results of the analysis indicate no evidence that the Project would have a widespread, consistent impact on property values in Fitzwilliam or the surrounding communities; therefore, the Project is unlikely to impact the regional real estate market. Additionally, the characteristics of the Project, specifically the low occurrence of visibility from most property locations and the few properties in close proximity to the Project, reduce the risk of potential negative impacts on property values from the Project.

Tourism and recreation comprise a significant portion of the New Hampshire economy. A study on the Project's impact on local and regional tourism was performed to develop an estimate of the marginal change to tourism and recreational activity in the region that could be reasonably expected to occur as a result of the Project. Based on information obtained from literature searches, combined with observations of the local area characteristics around the Project and observations of activity around the largest utility-scale solar project in New Hampshire, there is no evidence to indicate that the region will experience a significant negative economic impact in tourism and recreation from the Project.

Potential effects on community services and infrastructure in Fitzwilliam and related cost impacts were evaluated to determine any potential impacts from the Project. Two areas of potential community impact with tangible costs were identified: 1) short-term consulting assistance for Fitzwilliam; and 2) long-term emergency management planning. Short-term consulting assistance for Fitzwilliam will likely be necessary to ensure Fitzwilliam can develop a PILOT agreement and MOU with Chinook Solar that provides reasonable terms for Fitzwilliam, while also allowing Chinook Solar to pursue the Project consistent with its economic objectives. A well-developed PILOT agreement and MOU will help mitigate the risk of Fitzwilliam incurring longer term costs in legal and other professional services. Regarding long-term emergency management planning, additional financial resources may be required for the development of an emergency plan that identifies any resource gaps in Fitzwilliam's current emergency services.

Employment in the Region

The Project will have a positive effect on employment opportunities in the region both during construction and operation. During construction, the Project is expected to produce approximately 127 full-time equivalent (FTE) jobs in New Hampshire, paying approximately $10.7 million in wages and supporting $10.4 million in economic value in New Hampshire. Of the 127 FTE jobs anticipated, 58 are expected to be direct construction jobs, 31 are expected to be indirect

jobs, and 38 are predicted to be induced jobs created during Project construction. Associated indirect industries include wholesale suppliers and engineers, and examples of industries with induced jobs predicted include real estate, hospitals, and full-service restaurants.

Long-term, on-going benefits from purchasing local goods and services, landowner lease payments, and tax/tax equivalent payments to local and state government are expected to result in four to six FTE jobs, paying $0.2 to $0.4 million in wages in New Hampshire during Project operations. This would be expected to support $0.4 to $0.5 million in economic value annually in New Hampshire. Of the FTE operations jobs, 1.4 to 4 are predicted to be direct FTE jobs, 0.1 to 0.5 are expected to be indirect FTE jobs, and 1.5 to 2.5 are predicted to be induced FTE jobs. Direct jobs created from Project operations are expected to include jobs within the state and local government due to the increased tax-related revenue from the Project. Associated indirect industries include wholesale trade, commercial/industrial machinery and equipment rental, and architectural and engineering services.

Summary

Issuance of a Certificate for the Project will serve the public interest. The New Hampshire legislature has determined that it is in the public interest to stimulate investment in low emission renewable generation technologies in New Hampshire (RSA 362-F:1). As presented more fully in this Application, the Project is optimally sited to ensure there will be no unreasonable adverse environmental effects. Furthermore, the Project will provide real and quantifiable benefits to the public on both a local and regional level. As noted above, the Project supports critical legislative and public policy objectives to promote renewable energy technologies and reduce greenhouse gas emissions. Solar energy produces no air or water pollution or greenhouse gases, and it is well documented that solar energy generation offsets carbon-based generation and directly reduces climate-altering carbon dioxide emissions. The Project will produce enough clean energy to meet the annual energy consumption needs of approximately 7,000 average New Hampshire homes, and by diversifying the energy mix in New Hampshire and the region, the Project can contribute to reducing the volatility of regional energy costs. The Project's entire 30-MW capacity is contracted for 20 years with utilities in Connecticut, Massachusetts, and Rhode Island through seven executed Power Purchase Agreements with National Grid, Unitil, Eversource, and The United Illuminating Company.

The Project will provide a source of renewable electricity to help meet energy needs, while also supplying a new source of revenue for Fitzwilliam and local landowners. The public will also enjoy economic benefits from job creation as a result of the Project, and the Project will generate an estimated $10.4 million in added economic value to the New Hampshire economy as a result of jobs supported by Project construction. Furthermore, the proposed Project site is suitable for energy development due to its current use for timber harvesting, proximity to existing electrical infrastructure, appropriate site conditions, the avoidance of sensitive environmental resources, minimal visibility, and overall site accessibility. In summary, this Project is an excellent opportunity for New Hampshire to gain many significant energy and economic benefits through the construction of a well-sited utility-scale solar facility.

A. SIGNATURE OF APPLICANT

Certification by Executive Officer of Chinook Solar, LLC

In accordance with RSA 162-H:8, I, John DiDonato, a Vice President of Chinook Solar, LLC, do hereby swear and affirm that the information contained in this application is true and accurate to the best of my knowledge and belief.

I also certify that, as an Applicant to the New Hampshire Site Evaluation Committee, Chinook Solar, LLC, agrees to provide such information as the Committee shall require to carry out the purposes of RSA 162-H.

Chinook Solar, LLC

Name: John DiDonato
Title: Vice President

Date: October 14, 2019

State of Florida

County of Palm Beach

On this day 14th of October, personally appeared before me the above-name John DiDonato, Vice President of Chinook Solar, LLC and swore and affirmed that the information contained in this application is true and accurate to the best of his knowledge and belief.

Notary Public/Justice of the Peace
My Commission expires: 3-28-2020

Kim L. Otto
Notary Public - State of Florida
My Commission # GG 939840
Expires March 28, 2020

B. APPLICANT INFORMATION

B.1. Name of the Applicant

Chinook Solar, LLC (Chinook Solar)

B.2. Applicant's mailing address, telephone and fax numbers, and e-mail address

Chinook Solar, LLC
c/o Heath Barefoot
700 Universe Boulevard
Juno Beach, Florida 33408
Telephone: (561) 304-6078
Fax: (561) 304-5404
Email: heath.barefoot@nexteraenergy.com

B.3. Name and address of the Applicant's parent company, association or corporation if the applicant is a subsidiary

Chinook Solar is a Delaware limited liability company (LLC) formed in 2015 as a special purpose entity to develop, build, own, and operate the Chinook Solar Project (Project). Chinook Solar is an indirect subsidiary of NextEra Energy Resources, LLC (NEER). Chinook Solar operates from the offices of NEER at the address listed below.

NextEra Energy Resources, LLC
700 Universe Boulevard
Juno Beach, Florida 33408
Telephone: (561) 304-6078
Fax: (561) 304-5404
Email: heath.barefoot@nexteraenergy.com
Website: https://www.nexteraenergyresources.com/

B.4. If the Applicant is a corporation

B.4.a. The state of incorporation

B.4.b. The corporation's principal place of business

B.4.c. The names and addresses of its directors, officers and stockholders

The Applicant is not a corporation.

B.5. If the Applicant is a limited liability company

B.5.a. The state of the company's organization

Delaware

B.5.b. The company's principal place of business

See Application Section B.3.

B.5.c. The names and addresses of the company's members, managers, and officers

Officers:	Terrell Kirk Crews II	President
	Kathy A. Beilhart	Vice President and Treasurer
	Tom Broad	Vice President
	Paul I. Cutler	Vice President
	John DiDonato	Vice President
	Daniel Gerard	Vice President
	Matthew S. Handel	Vice President
	Michael O'Sullivan	Vice President
	Ronald R. Reagan	Vice President
	Gregory Schneck	Vice President
	Michael Sheehan	Vice President
	Melissa A. Plotsky	Secretary
	W. Scott Seeley	Assistant Secretary

The address for all officers is 700 Universe Boulevard, Juno Beach, Florida 33408.

B.6. If the Applicant is an association, the names and addresses of the residences of the members of the association

Chinook Solar, LLC is not an association.

B.7. Whether the Applicant is the owner or lessee of the site or facility or has some legal or business relationship to it

Chinook Solar has purchased an option to acquire up to 470 acres in fee from four landowners in Fitzwilliam, with purchase option terms of five years. Chinook Solar also has a leasehold interest in a portion of one property, totaling approximately 43 acres. This leasehold interest has an initial development period term of five years, with an extension of five years for the production term, including up to seven five-year extension terms. These purchase and lease option lands will be used to accommodate the facilities associated with the Project. These properties are owned by five distinct private landowners and comprise the entire proposed operational Project area.

All purchase and lease rights have been recorded at the Cheshire County Registry of Deeds.

C. SITE INFORMATION

C.1. Location and address of the site of the proposed facility

The Project is located in a sparsely populated rural area within the rural zoning district in the eastern portion of Fitzwilliam. The proposed location of the Project is south of New Hampshire (NH) State Route 119, east of NH State Route 12, and west of Fullam Hill Road. The Project access road is located at 90 Fullam Hill Road at the following coordinates: N 42°46'18.69" and W 72°6'2.17". The Project occurs on seven parcels privately owned by five landowners, and Project parcels are either under purchase or lease option with Chinook Solar. Project land control area consists of approximately 513 acres.

Directly east of the Project and west of Fullam Hill Road is a transmission corridor containing a 345-kV electric transmission line owned by Eversource Energy (Eversource), along with a separate corridor containing two 115-kV electric transmission lines, both owned by National Grid plc (National Grid). Chinook Solar will build a new Project substation and utility switchyard (collectively, the Substation) on site to interconnect to the electric grid. The point of interconnection is located approximately 1.2 miles south of the intersection with NH Route 119 and 0.7 mile north of the intersection with Fullam Hill Road and occurs on property under purchase option. Proposed access to the Project is via an existing road located off Fullam Hill Road.

A map of the Project location and parcels is provided in Figure C.1.

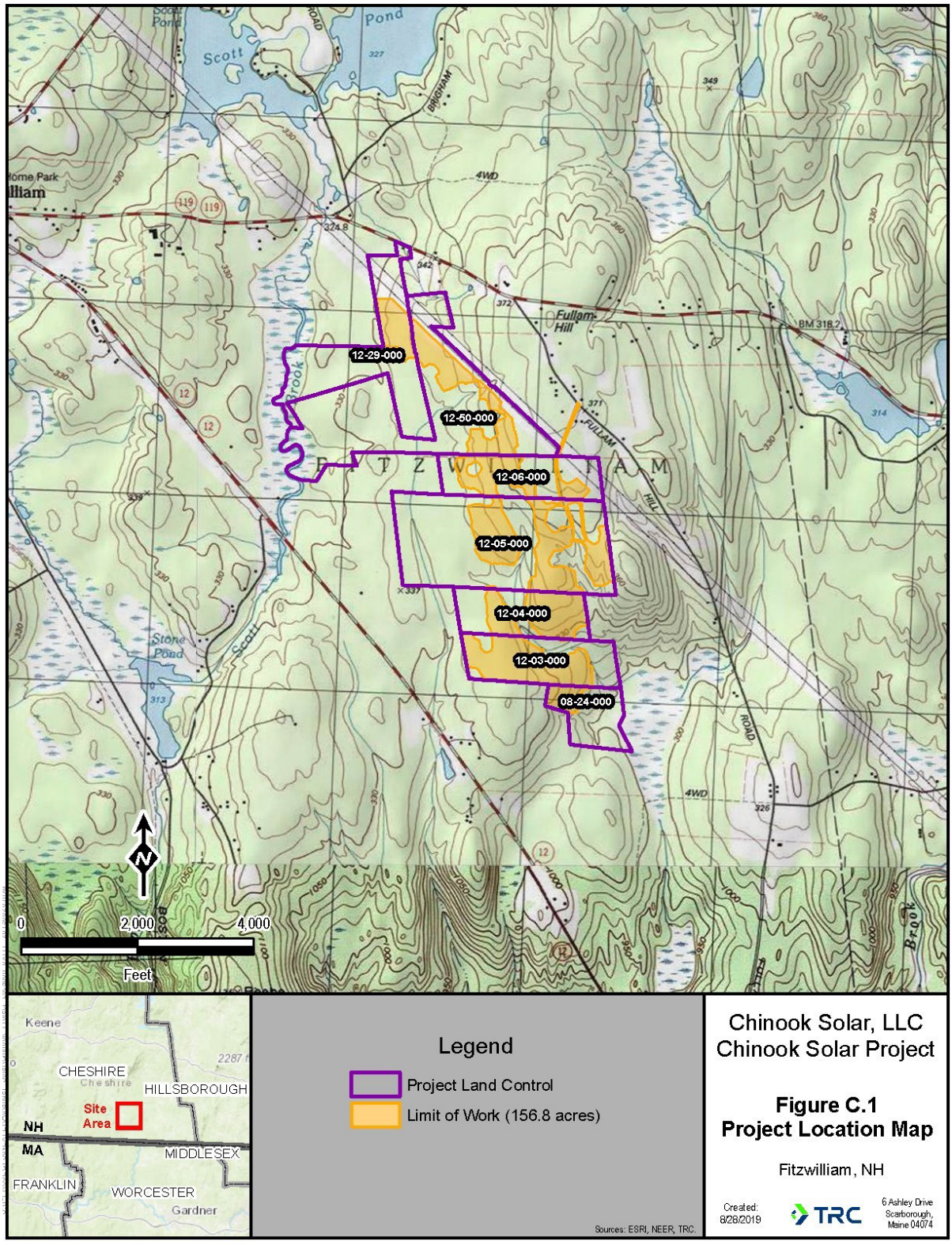

Figure C.1. Project Location Map

C.2. Site acreage, shown on an attached property map and located by scale on a U.S. Geological Survey or GIS map

The Project land control area consists of approximately 513 acres in the Town of Fitzwilliam in Cheshire County. The Project will be developed on private lands under purchase or lease option by Chinook Solar from five landowners, as depicted on Figure C.1 and referenced in Section C.1 above.

The area that will house Project facilities (e.g. solar panels, access roads, equipment pads, and Substation) will be approximately 110 acres. The total limit of work for Project construction will be approximately 159 acres, and area of clearing required for construction and operation of the Project will be approximately 129 acres.

C.3. Location of property lines, residences, industrial buildings, and other structures and improvements within or adjacent to the site

There are no residences, industrial buildings, or other structures or improvements within the Project land control area. Development adjacent to the proposed Project consists primarily of rural residential homes (and associated outbuildings) and some industrial and commercial buildings. Structures are generally located along three main routes that abut the Project area: Fullam Hill Road to the east; NH State Route 119 to the north; and NH State Route 12 to the west.

The nearest residence is located approximately 290 feet due south of the southernmost solar array. The owner of this residence has entered into a lease agreement with Chinook Solar. The nearest residence owned by a party who does not have a purchase or lease agreement with Chinook Solar is approximately 560 feet to the northeast of the northernmost Project limit. Other residences and industrial buildings that surround the Project are located approximately 600 feet or further from the Project.

The locations of structures relative to the proposed Project are illustrated on Figure C.3.

Figure C.3 Location of Residences, Buildings, and Other Structures Relative to the Proposed Project Site - refer to binder containing 11 x 17 documents

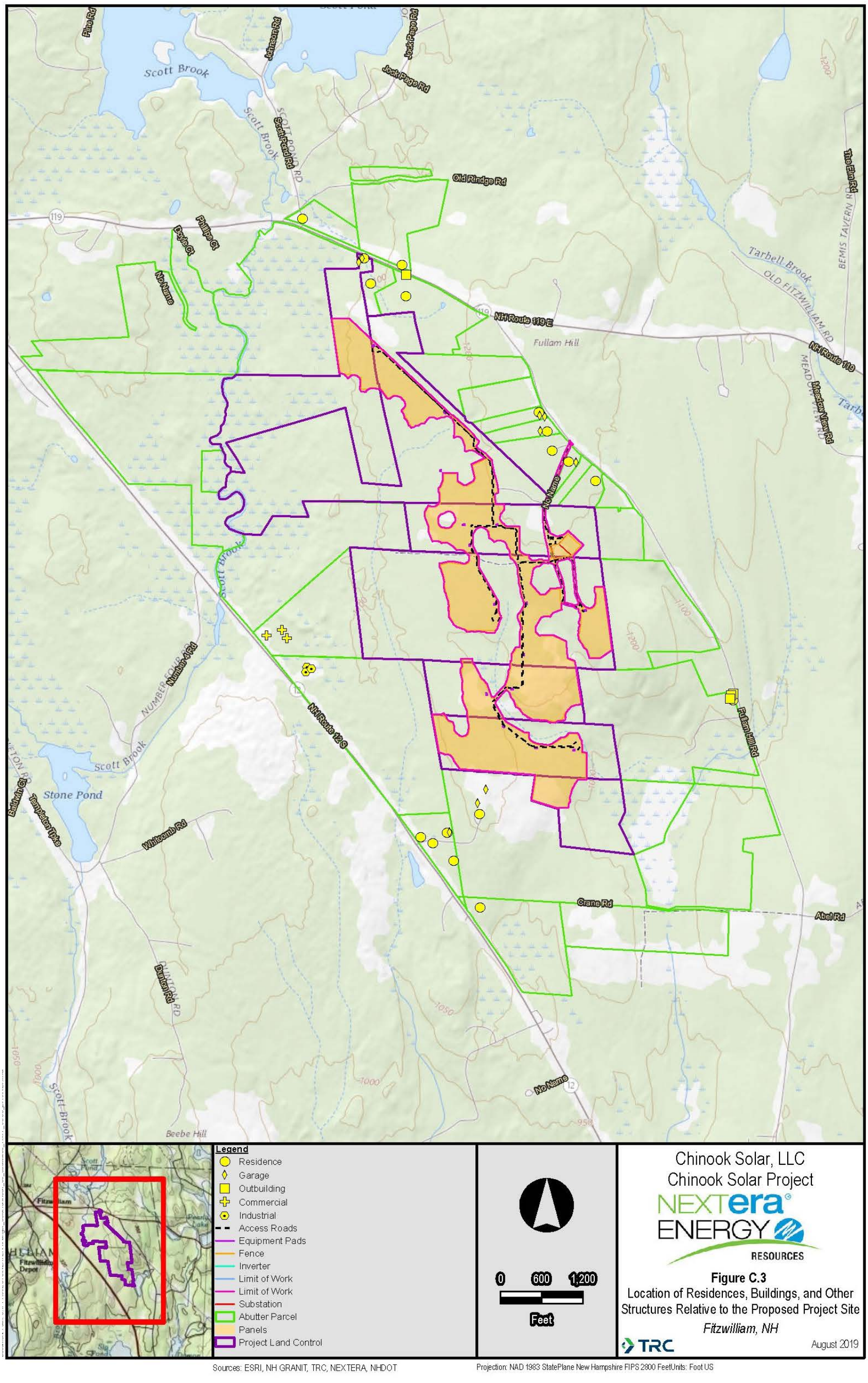

Figure C.3. Location of Residences, Buildings, and Other Structures Relative to the Proposed Project Site

C.4. Identification of wetlands and surface waters of the state

As part of natural resource surveys to support Project development, wetlands, surface waters, and vernal pools were field delineated by wetland scientists and subsequently reviewed by a New Hampshire Certified Wetland Scientist. In accordance with the New Hampshire Code of Administrative Rules for the Delineation and Classification of Wetlands (Env-Wt 301), wetland delineations were conducted according to the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region, v2* (USACE, 2012). Surface waters were identified using the State of New Hampshire Code of Administrative Rules Chapter Env-Wt 101 definitions, and vernal pools were identified using the State of New Hampshire Code of Administrative Rules Chapter Env-Wt 100.108 definitions.

Field delineations identified a total of 122 acres of wetlands, six streams, and 49 vernal pools within the 497-acre survey area. Though the Project land control area consists of approximately 513 acres, the wetland, waterbody, and vernal pool survey area was reduced to 497 acres due to the known existence of a large wetland complex in the northwestern portion of the Project land control area (see Figure J.1). Additionally, this portion of the Project land control area was not surveyed because this area was not considered for Project development in order to avoid these known natural resources. Wetland, waterbody, and vernal pool resources specific to the Project area are further described in Section J.3 of this Application, and a complete wetland, waterbody, and vernal pool survey report is provided in Appendix 15H.

Fitzwilliam has numerous surface water resources, such as Scott Pond, Stone Pond, Sip Pond, Collins Pond, Tarbell Brook, and Scott Brook. The pond nearest the Project is Scott Pond, located approximately 0.5 mile to the north of the Project, north of NH State Route 119. Scott Pond is 134 acres and is classified as eutrophic, indicating high phosphorous concentrations, less transparent water due to an abundance of algae, and many rooted plants in shallow waters (Town of Fitzwilliam, 2009). The pond is listed on the NHDES Consolidated List of Waterbodies Subject to RSA 483-B, the Shoreland Water Quality Protection Act (NHDES, 2019). Scott Pond supports a warmwater fishery and is connected to Scott Brook at the south end of the pond. Scott Brook is located along a portion of the western Project boundary. At the closest point, Scott Brook is approximately 0.25 mile west of the Project.

There will be no direct impacts to wetlands or waterbodies as result of the Project.

C.5. Identification of natural, historic, cultural, and other resources at or within or adjacent to the site

General Setting

Most of Fitzwilliam is comprised of undeveloped forested lands consisting primarily of second and third growth mixed hardwood and softwood forests. The majority of forested areas in Fitzwilliam are located in the Rural Zoning District, which constitutes approximately 80% of the total area in Fitzwilliam (Town of Fitzwilliam, 2009). Timber harvesting in Fitzwilliam has increased over the past 20 years as a result of clearing land for housing, harvesting timber for pallets and cord wood, and harvesting timber for other commercial purposes outside the region. In addition to abundant forested areas, there are several water features and numerous designated conservation lands in and near Fitzwilliam.

Historically, much of Fitzwilliam was cleared for sheep farming. In the early 1800s, the cost of imported wool created a great demand at the local level, and many farmers in New England

were raising sheep. Currently, the land in and around the Project primarily consists of forest in various stages of maturity, ranging from recent clear-cuts and early successional stands resulting from timber harvesting to mature forests.

During consultations with the NHF&G, an estimate of tree clearing needed for the Project, along with an estimate of the site that had already been cleared by the current landowners, was requested. Based on this feedback, a forest composition survey was conducted in 2017, as detailed in Section J.3. This effort served to classify the lands within the Project footprint into discrete natural communities and to identify the approximate age and existing condition of the forests. Results of the forest composition survey are summarized in Section J.3, and the full report is provided in Appendix 15G.

Subsequent to the 2017 forest composition survey, some of the current landowners have performed ongoing timber harvesting within the Project footprint, resulting in significant changes to the forested cover. To accurately document existing conditions at the Project, a drone flight was conducted in May 2019 capturing photographs and video footage of the landscape. The photographs and video footage demonstrate extensive harvesting has occurred since the 2017 field survey, and much of the Project footprint area has been harvested. Photographs captured during the drone flight and a figure depicting the corresponding photo locations are provided in Appendix 1.

Wildlife Resources

Fitzwilliam includes expansive tracts of undeveloped land and diverse natural resources, which are characteristic of southwestern New Hampshire. Large tracts of undeveloped lands provide ample habitat for a diverse array of native wildlife. The abundant natural resources in and around the proposed Project also provide habitat for many of New Hampshire's indigenous wildlife species.

Chinook Solar consulted with NHF&G, NHNHB, and USFWS to identify any documented significant wildlife species or critical habitats in the vicinity of the Project. The NHNHB records identified two species of turtles, one Special Concern species and one state endangered, in the vicinity of the Project. Chinook Solar consulted with the NHF&G to determine appropriate BMPs and conservation strategies to employ during construction to protect turtles. Additional detail is provided in Section J.3.

The USFWS records identified the potential presence of northern long-eared bat, a federally threatened species, in the vicinity of the Project. A summer presence/absence survey was conducted in 2016 to determine the potential presence of northern long-eared bat. The survey did not detect northern long-eared bat presence within the Project land control area. Chinook Solar consulted with NHF&G to discuss potential Project impacts on bats. As recommended by NHF&G, Chinook Solar will only perform tree clearing activities between November 1 and March 31 in order to protect bats during the maternity season. Additionally, the Project has been designed to maintain forested corridors connecting suitable bat foraging habitat. Further detail is contained in Section J.3 and Appendix 15E.

Conservation Lands

The Project is not located on conservation lands. Several conservation lands in Fitzwilliam provide protection for various natural resources, including forests, riparian areas, ponds, streams, and wetlands. In addition to providing habitat and protecting lands from potential development,

these conservation areas serve as recreational resources for outdoor activities. Municipal conservation lands in Fitzwilliam include Holman Meadow, the Gaseau Property, Katie Metzger Town Forest, and Widow Gage Town Forest (Town of Fitzwilliam, 2009). There are also seven private conservation easements in Fitzwilliam. State parks and lands in Fitzwilliam include the Fitzwilliam Rail Trail, Grant State Forest, and Rhododendron State Park.

The conservation land nearest the Project is the Rine Conservation Easement, which is held by the New England Forestry Foundation, Inc. The intent of this easement is to manage and protect 20 acres of land located approximately 0.8 mile southeast of the Project.

Historic and Cultural Resources

Fitzwilliam was incorporated in 1773 by Governor John Wentworth (Fitzwilliam Planning Board, 2012). At this time, there were only two roads in Fitzwilliam: a military road dating back to the French and Indian War and the "Great Road," now known as Fullam Hill Road. By 1775, the population had grown to 250 people. Early settlers in Fitzwilliam were primarily farmers who were clearing the land to grow flax and raise sheep. At the start of the 19th century, sawmills, gristmills, tanneries, stores, 12 schools, and a singing school existed in Fitzwilliam. Economic growth and patterns of development primarily originated from the central points of Fitzwilliam Village and Fitzwilliam Depot.

Settlement in Fitzwilliam developed in conjunction with 19th century industrial activity and construction of the Cheshire Railroad. The railroad's proximity to Fitzwilliam's substantial granite outcroppings catalyzed the growth of the local granite industry, which peaked between 1915 and 1918. Agricultural production remained an important economic engine in the late 19th and early 20th centuries, largely aided by the railroad. Manufacturing continued through the early 20th century, though overall declines in output occurred. By 1924, Route 12 in Fitzwilliam was constructed, incorporating parts of the old military road (also known as Turnpike Road). By 1936, the highway system also included Route 119 in Fitzwilliam.

The Fitzwilliam Historical Society was formed in 1961(Fitzwilliam Planning Board, 2012). The primary function of the Historical Society is to discover and collect material that illustrates the history of the area. In 1970, Fitzwilliam established a Historic District Commission to define one or more historic districts. The current boundaries of the Historic District, which primarily consist of the current village center, were established in 1992. The Historic District Commission oversees the historic structures within the district.

Fitzwilliam is now a largely residential community, with seasonal and year-round populations. Scenic and recreational tourism is a major economic driver in Fitzwilliam. Abandoned farmland in the region has gradually reverted to forest. Development pressures stemming from population increases in the 1970s and 1980s resulted in several land conservation and management plans. Fitzwilliam adopted a land use ordinance in 1982. Fitzwilliam currently owns over 400 acres of public forests and meadowlands (Fitzwilliam Planning Board, 2012).

C.6. Evidence that the applicant has a current right, an option, or other legal basis to acquire the right to construct, operate, and maintain the facility on, over, or under the site

The Project will be sited on property currently owned by five landowners. Chinook Solar has signed Option Agreements with four of those landowners, which gives Chinook Solar the irrevocable option to purchase the respective properties in fee simple. Chinook Solar has also signed a Lease Agreement with the fifth landowner. This Lease Agreement provides Chinook Solar the rights to construct and operate the Project on that property. Memoranda describing the Option and Lease

Agreements are contained in Appendix 2. Between the Option Agreements and the Lease Agreement, Chinook Solar has the existing right, or the irrevocable legal basis to acquire the right, to construct, operate, and maintain the Project on the site. The area of the leased property may be redefined to only include the developed area. Additional agreements may be required for a temporary staging (laydown) area.

C.7. Evidence that the applicant has a current or conditional right of access to private property within the boundaries of the proposed energy facility site sufficient to accommodate a site visit by the committee

Chinook Solar currently has the right of access to the Project area, which will accommodate a site visit by the SEC. In Section 12(e) of the Option Agreements, the current landowners explicitly agreed to cooperate with Chinook Solar's efforts to secure all necessary permits. Similarly, in Section 7.5(a) of the Lease Agreement, the property owner also agreed to fully support and cooperate with Chinook Solar's efforts to obtain all necessary permits.

D. OTHER REQUIRED APPLICATIONS AND PERMITS

D.1. Identification of all other federal and state government agencies having jurisdiction, under state or federal law, to regulate any aspect of the construction or operation of the proposed facility

- NHDES, Water Division, Alteration of Terrain (AoT) Bureau (authority under state and federal law over alteration of terrain and pollutant discharge);
- New Hampshire Division of Historical Resources (NHDHR) (consultation to determine compliance with Section 106 requirements of the National Historic Preservation Act);
- New Hampshire Department of Transportation (potential permit for oversize/overweight vehicles);
- New Hampshire Department of Safety (NHDOS) (blasting permit); and
- NHDOS, Division of Fire Safety, Office of the State Fire Marshal (authority to enforce applicable fire codes).

The Project has been designed to avoid impacts to wetlands and waterbodies; therefore, no permits will be required from the NHDES Wetlands Bureau, the NHDES Water Management Bureau, or the United States Army Corps of Engineers (USACE). The USACE provided a letter confirming no USACE jurisdiction for the proposed Project, included in Appendix 3. Following with no USACE jurisdiction, there is no requirement for consultation with the United States Fish and Wildlife Service (USFWS) or the United States Environmental Protection Agency (USEPA).

D.2. Documentation that demonstrates compliance with the application requirements of such agencies

Information satisfying the application requirements, if applicable, of the agencies listed above in D.1 has been included within the agency application forms. Copies of these forms are included in the Appendices to this application, as referenced in Section D.3, below

D.3. A copy of the completed application form for each such agency

A copy of the completed NHDES AoT permit application is provided in Appendix 4 of this Application.

D.4. Identification of any requests for waivers from the information requirements of any state agency or department whether represented on the committee or not

Chinook Solar has requested, and the Committee granted on September 5, 2019, a waiver from the requirement that the Applicant generate complete paper copies for each recipient. Chinook Solar proposed to provide complete copies of the Application in a combination of paper and electronic format.

Chinook Solar will be requesting a waiver from the requirement that underground infrastructure at depths less than four feet below grade be removed from the site; requesting instead that the removal requirement apply to all infrastructure to a depth of three feet. Chinook Solar will also be requesting a waiver for solar racking piles that will have been concreted into rock.

E. ENERGY FACILITY INFORMATION FOR NON-ELECTRIC GENERATING FACILITIES

The proposed Chinook Solar Project meets the definition of a renewable energy facility under RSA 162-H:2, XII. The requirements contained in NH Administrative Rule Site 301.03(e) states that if the application is for an energy facility, including an energy transmission pipeline, that is not an electric generating facility or an electric transmission line, the application shall include the items listed below. Given that the proposed Project is an electric generating facility, the requirements outlined in NH Administrative Rule Site 301.03(e)(1-8) are not applicable.

E.1. Type of facility being proposed

Not applicable.

E.2. Description of the process to extract, produce, manufacture, transport or refine the source of energy

Not applicable.

E.3. Facility's size and configuration

Not applicable.

E.4. Ability to increase the capacity of the facility in the future

Not applicable.

E.5. Raw materials used

Not applicable.

E.6. Production information

Not applicable.

E.7. Map showing the entire energy facility

Not applicable.

E.8. Construction and operation details for a high pressure gas pipeline

Not applicable.

F. RENEWABLE ENERGY FACILITY INFORMATION

F.1. Make, model and manufacturer of the unit

Chinook Solar will install approximately 116,766 solar panels that will be fixed tilt at a 16° tilt. The Project has been designed using 405-watt solar panels. The proposed panels for the Project will be a mono or poly-crystalline design provided by a tier one panel supplier. The currently proposed panel is an Eagle HC 72 405 W manufactured by Jinko. The specific panel supplier and model will be finalized closer to construction. As such it is possible that solar panels selected at the time of Project construction may differ from those identified here based on conditions such as availability and technological advances.

F.2. Capacity in megawatts, as designed and as intended for operation

The total nameplate capacity of the Chinook Solar Project is 30 MW AC.

F.3. Type of unit

As described in Section F.1 above, the proposed panels to be used for the Project are Eagle HC 72 405-watt panels manufactured by Jinko. It is possible that solar panels selected at the time of Project construction may differ from those identified here based on availability and supply conditions.

F.3.a. Fuel utilized

No fuel will be used to operate the generation equipment for the Project, as the Project will be powered by clean, natural, and renewable solar energy.

F.3.b. Method of cooling condenser discharge

Not applicable. No cooling water is required nor are there any discharges.

F.3.c. Unit efficiency

Unit efficiency is a term more typical for a fossil fuel plant that converts fuel into heat and then into electricity than for a solar power facility. However, a convention has been established to compare the efficiency of various solar panels based on a specified environmental condition. Using this convention, the proposed solar panel for the Project will have an efficiency of approximately 20% which is consistent with solar panels commonly available throughout the industry.

F.4. Any associated new substations and transmission lines

The Project is located adjacent to two transmission line corridors, one containing a 345-kv line owned by Eversource and the other containing two 115-kV lines owned by National Grid. As described in Section H.1 below, the Project proposes to interconnect to the existing National Grid I-135 Line, which is the northeastern most of the two lines. The proposed interconnection location is approximately 2.9 miles south of Eversource's Fitzwilliam Substation. The Project proposes to interconnect to this line via a new Substation located onsite, directly southwest of the existing transmission line corridor and approximately 0.2 mile west of Fullam Hill Road. No new electric transmission lines will be used aside from the short conductors used to loop the existing transmission line.

The Project's Substation will connect the Project to the grid. The Substation will be located in an area that is approximately 2 acres in size. Equipment within the Substation will include circuit breakers, bus support, disconnect switches, a lightning mast, the 115/34.5-kV main transformer, metering equipment, and 115-kV A-Frame structures to support electric lines leaving the Substation. The tallest equipment will be the lightning masts, which are self-supporting and approximately 55 feet tall. Short underground 115-kV bonds will loop the existing National Grid 115-kV transmission line into the Substation.

F.5. Copy of system impact study report for interconnection of the facility as prepared by ISO New England, Inc. or the interconnecting facility

The System Impact Study request was submitted to the Independent System Operation - New England (ISO-NE) in April of 2019. Interconnection is currently under review by ISO-NE, and the System Impact Study report is anticipated in November 2019. The System Impact Study report for the Project will be provided to the SEC as soon as it is completed by the ISO-NE.

F.6. Construction schedule, including start date and scheduled completion date

Construction of the Project will begin after all required approvals and permits have been obtained and all commercial agreements are finalized. Construction is currently anticipated to commence in November of 2020, though the start of construction will ultimately depend on when a Certificate is obtained. Depending on winter weather and other seasonal conditions, the expected Commercial Operation Date for the Project is October of 2021.

A Project schedule has been developed to outline key milestone dates, studies, permits, interdependency of tasks, and to facilitate coordination of equipment acquisition and delivery. Collection line construction will be coordinated with the final construction schedule of the interconnection facilities and the remainder of the Project facilities. The construction schedule will be maintained by Chinook Solar in conjunction with the Engineering Procurement and Construction (EPC) general contractor. This schedule reflects monthly development status, scheduled deliveries of major equipment, and the availability of materials and labor resources based on weather and other factors. The Project-specific activities and the anticipated timeframe for each have been included in the Project schedule included in Appendix 5.

F.6.a. Construction process

Under the close supervision of Chinook Solar's management team, the EPC general contractor will be responsible for managing the construction of the Project. The EPC general contractor scope will include all technical and construction services required to complete and turn over a fully commissioned and operational project within designated cost, schedule, quality, and safety requirements.

Initial Field Work

The initial field work during equipment mobilization includes surveying and site flagging to establish clearing areas, buffer zones, and non-disturbance areas. Flagging will be done using survey grade Global Positioning Systems (GPS) that will guide subsequent logging and excavation. This will prevent inadvertent over-clearing and minimize tree removal. A qualified logging company will clear and remove trees and vegetation where necessary to allow site work to proceed. Initial road construction will begin as soon as sufficient areas have been cleared to enable drilling and excavation equipment to maneuver around the site.

Clearing and Grading

A laydown area will be developed in one location adjacent to the southern limits of the Project to be used during construction. This laydown area will be created by stripping and stockpiling the topsoil and grading and compacting the subsoil. Gravel will then be installed to create a level working yard. If there is a soil base, geotextile fabric may be used below the gravel. Electric and communication lines may be brought in from existing distribution poles to allow connection with construction trailers. In that case, at the end of construction, utilities, gravel, and any geotextile fabric will be removed, and the site will be restored to pre-construction condition.

In order to clear the construction area so that the land can be worked, vegetation is removed along the proposed roads, collection system, and around solar panel array locations. For transport roadways, clearing is typically done to establish an approximately 20-foot corridor centered on the road alignment. Where the collection system is overhead and adjacent to the transport roadway, an approximately 20-foot corridor will be cleared to allow for the installation of poles and wire next to the road. Following the initial timber harvesting, additional clearing will be done by mechanical means, using heavy equipment to remove debris in the corridors so that the area is ready for drilling, blasting, excavation, and earthwork activities. All marketable timber will be sold, and smaller diameter trees and brush will be chipped and used on site for re-vegetation and soil stabilization. Topsoil will be stockpiled and used during re-vegetation so that native site soils, organic matter, and seeds are kept on the site. Areas surrounding the solar array locations will be cleared of trees and graded to an even surface.

Due to the shallow topsoil that exists in the southeast area of the Project, some areas of the Project site will likely require blasting in order to install solar arrays and the underground collection system. Chinook Solar's intent is to minimize the need for blasting. Given the site conditions, it is likely that some blasting will be required to complete installation of utility poles for overhead collection lines and to excavate runs of underground collection lines. Various methods of anchoring the racking system to bedrock are available for areas of shallow depths and, therefore, mass blasting in the areas of the proposed arrays is not anticipated. These include solar racking piles that are concreted into rock. Any blasting that is done will be in strict conformance with a Project blasting plan, which will be provided to Fitzwilliam and reviewed and approved by the NHDOS for compliance with explosives storage regulations. Blasting will be conducted under the direct management of the EPC contractor by a licensed subcontractor who possesses experience and complete qualifications and will be conducted in accordance with all state requirements. Typical blasting plan provisions include advance notification through area newspapers and notices posted at the Town Hall. All blasting plans require a detailed site control plan to ensure that only licensed workers are in the vicinity and to document safety and control measures tailored to the site. These measures include warning signs, warning sounds (air blasts), and physical site control, including in wooded areas, for an appropriate diameter around each blast site.

Grading and Drainage

As part of the site design, Chinook Solar's civil engineer, Tighe & Bond, has produced a grading and drainage plan with details on approved construction measures and BMPs for controlling stormwater and drainage for the site. A stormwater pollution prevention plan will be prepared for the Project by the EPC prior to the start of the construction phase and submitted for review and approval with the NHDES and maintained onsite. Culverts will be installed per the design plans as part of the road construction to maintain or improve the drainage of the area without increasing erosion of topsoil. Culverts, level spreaders, and additional detention areas that are needed

based on the Project's impacts will be maintained during operations in accordance with state requirements. Chinook Solar has consulted with the NHDES and NHFG on site-specific drainage and stormwater control measures. During construction, the Project will install and maintain temporary sediment and stormwater control devices, as required by the NHDES, such as silt fences, silt socks, wood chips, and swales. After solar panel installation is complete, the Project will re-seed and restore non roadway areas to ensure that exposed soils are not subject to erosion.

Road Construction

In general, road construction starts with topsoil stripping and grubbing stumps and organic material. Stripped topsoil will be stockpiled along the road corridor for use in site restoration. Any grubbed stumps will be removed, chipped/ground, or otherwise disposed of in accordance with applicable regulations. The ground stumps are an excellent local source of highly effective erosion control mix. Roads will be constructed by grading and compacting to the depth necessary to meet the specifications required for construction equipment. In many areas, excavation or fill will be required so the road can meet design parameters. Gravel is then spread to accommodate the required roadway width and further compacted to provide a permanent gravel road. Drainage ditches, swales, culverts, and appropriate sediment and erosion control measures (e.g., silt fencing) will be installed where access roads are adjacent to or cross wetlands or streams. Culvert designs have been coordinated with the NHDES. Maintenance will be performed, as needed, so that site access is maintained throughout the year.

The main Project access road from Fullam Hill Road is an existing road that will provide access to the Project interconnection, substation, collection system, and solar panel arrays. It will be upgraded and improved prior to installing solar panel support racking. Secondary access roads (i.e., those designed to provide access to transformer/inverter stations associated with the solar panel arrays) will be constructed after racking is installed. Chinook Solar will maintain these roads, as necessary.

Solar Panel Array Racking

The start of solar array racking construction is expected to occur after most earth work is completed in the array areas. The solar panel racking piles will be placed into the ground via direct drilling, pile driving, or vibratory hammering (to a depth of 6 to 10 feet, on average). The solar panel racks will be assembled and bolted together in the field onto the piles.

Trenching for New Electric Conduit

Concurrent with the solar panel racking, the direct current (DC) conduit connecting solar panels to the equipment pads will be installed. Trench excavations will be backfilled to match existing grades, and then exposed soils will be temporarily stabilized via mulch cover.

Installation of Solar Panels

The solar panels will be mounted as the racking system is assembled in accordance with all applicable codes and state requirements.

Inverter and Step-up Transformer Stations Construction

The transformer and centralized inverter stations will be installed in the same order as the solar panel racking is installed. The inverter and transformers will be constructed on a common pad as a single unit.

Alternating Current Electric Collection Lines

The inverter/transformer stations will be connected to the Project's Substation via overhead and underground collection lines. The underground lines will be installed via a combination of open trenching and possibly horizontal directional drilling, if necessary, to avoid impacts to wetlands and other avoidance areas. Most of the alternating current (AC) collection lines will be accompanied by a fiber optic data cables that transmit data and control information between the generation portions of the Project and the Substation.

Removal and Disposal of Construction Debris

Debris will be removed from the site during construction by a local hauling company through the Project's general contractor. Typically, sites do not produce large amounts of waste during construction. Due to cut and fill methods and foundation excavation, some spoil piles may be made on site. In those instances, all spoil material will be natural to the site and provisions will be made for large organic material (such as stumps and logs) to be ground and used on site. These areas will be re-vegetated at the conclusion of Project construction.

Post-construction and Reclamation

At the conclusion of Project construction, the areas that have been cleared and do not contain a permanent structure will be re-vegetated. This helps to reduce erosion and promotes the site's natural condition. Restored areas will include road edges, cut and fill slopes, temporary construction access, temporary roads, and laydown areas. This process will generally involve the following sequence of activities:

- Seeding and mulching all disturbed soil;
- Spreading organics and seed on fill slopes and non-ledge cut slopes; and
- Restoring the laydown area used during construction.

At the conclusion of construction and restoration, silt fences and temporary sediment and erosion control measures will be removed as necessary, in accordance with all applicable permit conditions. As described above, the Project will be re-vegetated using a seed mix following construction. The seed mix will consist of low-growing plant species to minimize the need for vegetation maintenance and mowing within the Project.

F.7. Anticipated mode and frequency of facility operation

The Project will be a non-dispatchable facility and will produce electricity depending on suitable environmental conditions. The Project will produce various amounts of electric power during the day and shut off each night.

G. ELECTRICAL INTERCONNECTION LINE INFORMATION

The Project will interconnect to the existing National Grid 115-kV electric transmission line via a new Substation located on site. No new transmission lines will be required for interconnection. A solar electrical collection system will transfer the electric power generated from the solar panels to the Substation, which has been sited adjacent to the existing electric transmission corridors.

The Substation will deliver generated power from the solar arrays via the inverters to the electric grid. The Substation will include a main power transformer that will increase the collection system voltage of 34.5-kV to transmission voltage at 115-kV. Additional details pertaining to the Project's Substation are provided in Section F.4 above and Section H.1 below. Substation design drawings are included in Appendix 6, and the location of the proposed Substation is illustrated on Figure G.1 below.

G.1. Location shown on U.S. Geological Survey map

The location of the proposed Project is described in detail in Sections C.1 and C.2 of this Application. The location of the proposed Substation and transmission interconnection is shown on Figure G.1.

G.2. Map showing the entire electric transmission line

No new electric transmission or distribution lines will be required for the Project aside from the short, underground conductors required to loop the Substation to the existing transmission line; therefore, a map of the electric transmission line is not applicable. The Project's Substation is depicted on Figure G.1, and the electrical drawings are provided in Appendix 6.

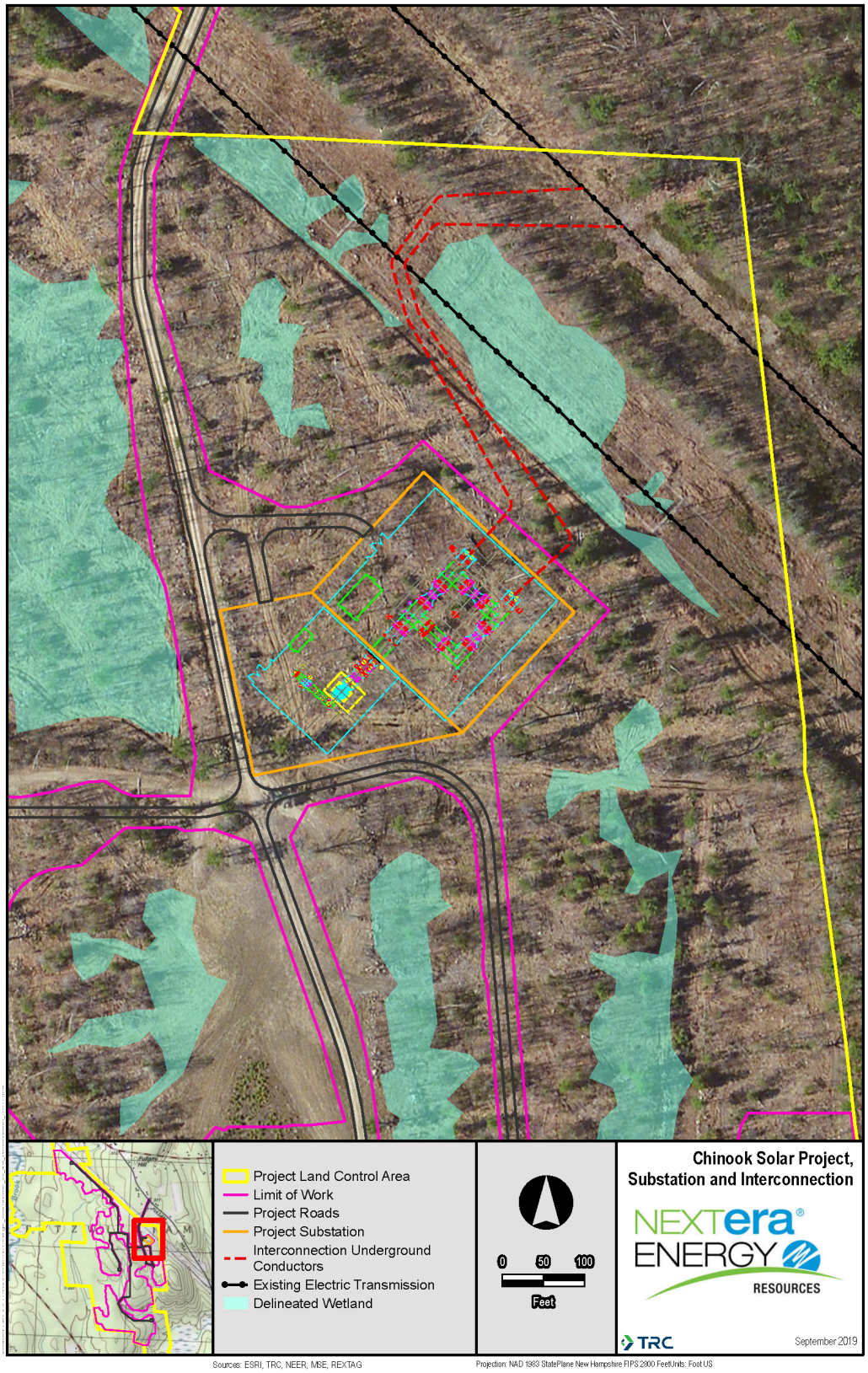

Figure G.1. Map of Project Substation and Transmission Interconnection

G.3. Corridor width

G.3.a. New route

Corridor width for a new transmission route is not applicable because the Project will not require a new transmission line.

G.3.b. Widening along existing route

The Project will not require new transmission line development.

G.4. Length of line

Short underground 115-kV conductors will loop the Substation to an existing 115-kV National Grid transmission line. The conductor lines will be approximately 600 feet long, though the exact length will depend on the final Substation design and exact interconnection location.

G.5. Distance along new route

The Project will not require development of a new transmission route.

G.6. Distance along existing route

The Project will not require development of a new transmission line along an existing transmission route.

G.7. Voltage (design rating)

As described in Section F.4 above, the Project will interconnect to National Grid's I-135 115-kV line between Eversource's Fitzwilliam Substation and Unitil's Flagg Pond Substation via the Project's three-breaker ring bus within the Substation located in the eastern portion of the Project area. The Substation will be a standard three-phase 115-kV transmission level substation. The Project's Substation will provide an interface between National Grid's facilities and the Project. The Substation will be designed and constructed consistent with applicable industry standards, National Grid requirements, applicable local, state, and federal codes, and standard utility practices. Once it is constructed, the switchyard portion of the Substation will be turned over to National Grid.

G.8. Any associated new electric generating unit or units

For a solar facility, the generating units consist of inverters. The Project is planning to include 15 solar inverters. Each inverter will include an associated transformer. The inverters will convert DC generated electric power from solar panels to AC generated electricity. The transformer associated with each inverter will increase the AC inverter voltage to 34.5-kV AC collection system voltage.

G.9. Type of construction (described in detail)

The Substation construction will consist of site preparation to support the building of a substation pad. The substation pad will include all structural components and electrical equipment and systems. The pad will be surrounded by a security fence per NESC requirements. The foundations for the various equipment will consist of concrete slabs, mats, and piles. Conventional construction

equipment such as cranes will be used to erect and/or place steel structures and electrical equipment on the foundations. Electrical cable, conductors, and busswork will connect the various pieces of electrical equipment. Relay vaults, which will house protection and control relay equipment, plant control equipment and communication equipment, will be prefabricated and set on a foundation. A grounding grid will be installed within the pad and will be connected to all equipment and structures.

G.10. Construction schedule, including start date and scheduled completion date

Substation construction is expected to commence concurrently with Project construction, following receipt of all necessary regulatory approvals. Construction is anticipated to commence in November 2020 but will ultimately depend on when the Certificate is obtained. The anticipated Project construction schedule is provided in Appendix 5.

G.11. Copy of any proposed plan application or other system study request documentation required to be submitted to ISO New England, Inc.

A copy of the system study request submitted to ISO-NE is included in Appendix 7.

G.12. Copy of system impact study report for the proposed electric transmission facility as prepared by or on behalf of ISO New England, Inc. or the interconnecting utility

The System Impact Study request was submitted to the ISO-NE in April of 2019. Interconnection is currently under review by ISO-NE, and the System Impact Study report is anticipated in November 2019. The System Impact Study report for the Project will be provided to the SEC as soon as it is completed by the ISO-NE.

H. ADDITIONAL INFORMATION

H.1. Detailed description of the type and size of each major part of the proposed facility

The Project will consist of solar panels, pad-mounted transformers and inverters, underground and aboveground collection lines, the Substation, and other necessary infrastructure (e.g. access roads and security fencing) as shown on the civil design drawings in Appendix 8A. As described in Section F of this Application, there will be no new transmission lines. It is expected that the total direct impact of the pilings associated with the solar panel racking system, the equipment pads, the access roads, and the Substation will be approximately 7.3 acres. The final Project footprint area will be approximately 110 acres. Each element of the Project is described in more detail below.

Solar Panels and Racking System

Linear arrays of solar panels will be mounted on fixed tilt metal racks supported by vertical pile foundations driven into the ground; in some areas, screws, rock pins, or other anchoring technologies may be used in lieu of piles (depending on site conditions). In general, the piles will consist of steel H-beams or a similar cross-section design.

Transformers and Inverters

The Project will have up to 15 pad-mounted transformers and inverters, each housed together, located throughout the Project solar arrays (transformer/inverter station). DC electricity from the solar panels to the transformer/inverter stations will be routed primarily through underground collection lines. From the transformer/inverter stations AC electricity will be routed via 34.5-kV collection lines to the Project's Substation.

Electrical Collection System

The solar panel arrays will be connected to the Substation by primarily underground 34.5-kV electric collection lines. The electrical collection system will consist of primarily underground lines that will transmit the electricity generated by the solar panels, through the inverters to the Substation. Collection lines will typically run along the proposed access roads and will not require additional clearing. The collection lines will be in a daisy chain configuration going from one inverter to the next and will terminate at a disconnect structure located in the Substation. The electrical collection system designs are provided in Appendix 6.

Two 34.5-kV three-phase collection lines will be installed from the Project's Substation to the inverters. All collection system cabling will be designed and constructed consistent with applicable industry standards, National Grid requirements, applicable local, state, and federal codes, and standard utility practices.

The Project will be seeking to subdivide the land on which the Substation (which includes the switchyard and the Project's collection substation) is located to accomplish the following: Once construction of the Substation is completed, National Grid requires that the switchyard and the land on which it is located, be transferred to it. In addition, NEER (an affiliate of Chinook Solar) is contractually obligated to transfer the land interests under which the Project's collection substation is located, to a third party entity (although Chinook Solar will own the improvements to be installed on such lands) and the remaining portion of the lands (that are not transferred) will be retained by Chinook Solar for use with the Project. Chinook Solar will be working with National

Grid and others, including local and county officials as required, to determine the necessary steps to accomplish these transfers. Chinook will keep the SEC updated as it works its way through this aspect of the Project.

Substation

The Project's Substation will be located directly southwest of the existing transmission line corridor and approximately 0.2 mile west of Fullam Hill Road. The Substation will be located in an area that is approximately 2 acres in size. Equipment within the Substation will include switch gear, circuit breakers, bus support, a lightning mast, the 115/34.5-kV transformer, and 115-kV A-Frame structures to support electric lines leaving the Substation. The tallest equipment will be the lightning masts, which are self-supporting and approximately 55 feet tall. The yard surface of both areas will be comprised of gravel/crushed stone. The Substation will be surrounded by a seven-foot-tall chain link fence with an additional foot of barbed wire, per the NESC. Substation design drawings are provided in Appendix 6.

Access Roads

The Project will include a main site access road and interior access roads. The main site access road will be via an existing gravel road located off Fullam Hill Road. The main site access road will provide access to the Substation and the additional roads located throughout the solar arrays. Access roads will be gravel and 12 feet wide. As shown on the Project site drawings, the roads have been shaped to allow larger vehicle passage and egress in case of an emergency. Temporary construction access for southern portions of the Project area will occur via Crane Road, located off NH State Route 12. A plan depicting the temporary construction access is contained in Appendix 8B. Stabilized construction entrances at the main site access and temporary access will be installed during construction.

Laydown Areas

A laydown area will be required during construction for contractor offices and for storage of materials and equipment. The laydown area approximately 5 acres in size will be located in an upland field at the end of Crane Road in Fitzwilliam, which is adjacent to the southern end of the Project. A plan depicting the laydown area is provided in Appendix 8B. The laydown area will not require any tree clearing and will not result in any impacts to natural resources.

Temporary erosion control measures will be implemented at the laydown area to prevent erosion and sedimentation, and a minimum 25-foot setback from adjacent natural resources will be maintained. After construction is complete, gravel, unused construction materials, and equipment will be removed from the laydown area. The laydown area will then be stabilized and seeded using approved native New Hampshire seed mixes, and the site will be allowed to revegetate with native plant species.

Perimeter Fencing

A 7-foot-tall perimeter chain link fence will be installed. Following guidance from NHFG, no barb wire will be used on the top of the fence. Additionally, the fence will be raised approximately 6 inches from the ground to allow smaller wildlife to pass under the fence. Fencing will generally be installed around each non-contiguous solar panel array, as opposed to fencing encompassing the entirety of the Project. This will provide corridors for larger wildlife to pass through the Project area.

Perimeter fencing at the Project is a safety requirement per the NESC. Gates will be installed in the fencing at various locations throughout the Project to allow access for maintenance and emergency vehicles as described in Section J.4.d and Appendix 16D.

H.2. Identification of the applicant's preferred location and any other options for the site of each major part of the proposed facility

Properly siting a utility-scale solar project is a complex and iterative process involving several interrelated criteria such as environmental constraints, engineering design needs, equipment requirements, aesthetic, and community considerations. Chinook Solar performed environmental surveys and other due diligence review of the Project location for approximately three years. Natural and cultural resource surveys, visual assessments, and other studies needed for engineering purposes, such as geotechnical investigations and a site-specific soil survey, helped inform the Project design and feasibility. The Geotechnical Engineering Report is provided in Appendix 9A, and the Soil Survey Report is contained in Appendix 9B. Natural and cultural resources and aesthetics are discussed elsewhere in this Application.

Prior to selecting the Project location, Chinook Solar evaluated several areas in New Hampshire, and once the site was selected, multiple solar array design iterations were carried out to meet environmental constraints at this site. The primary site selection criteria included environmental appropriateness (uplands), topography and aspect, grid-interconnection, and visibility. Alternative nearby sites were considered prior to selecting the Project site; however, these alternatives were determined to be less desirable due to extensive wetland resources and a lack of nearby transmission resources. After extensive review, the Chinook Solar Project site was determined to be the preferred location and a suitable site for the Project.

Environmental

The Project was sited and designed to avoid and minimize impacts to sensitive and protected environmental resources. The Project is compatible with existing land uses and will not unreasonably impact the environment or unique wildlife habitats. Potential effects on local and regional wildlife and vegetation, as well as the potential for impact to surrounding scenic and recreational resources were considered and multiple iterations of the project design were evaluated.

The proposed Chinook Solar Project site is also suitable from an environmental perspective because there are no conservation restrictions on the site that would limit the development of the Project. Additionally, there are no critical habitats present on the Project site. Wetlands and vernal pools were avoided or impact was minimized. Further detail describing the various studies that have been conducted to demonstrate the environmental appropriateness of the site is provided in Section J.

Compatibility with Existing Land Uses

The Project was sited to achieve compatibility with existing land uses to the greatest extent possible. Land within the Project area has been harvested for timber for several decades. Recent logging operations, unrelated to the Project, have impacted a substantial amount of the Project land control area. A drone flight was conducted in May of 2019 to capture photographs and video footage to document the current forest condition. Photographs from the drone flight and a figure depicting the corresponding photo locations are contained in Appendix 1.

The Project is consistent with local and regional energy initiatives, as well as the Fitzwilliam Master Plan. The New Hampshire Legislature has determined that it is in the public interest to stimulate investment in low emission renewable energy generation (RSA 362-F:1). The Project advances critical legislative and public policy objectives to promote renewable energy technologies. Additionally, the Fitzwilliam Master Plan outlines an overall goal to "balance issues of energy conservation, protection of natural resources and economic development in a way that maintains rural character and sustains a viable community." One of the goals identified in the Fitzwilliam Master Plan is to support and encourage energy conservation. Several strategies are outlined under this goal, one of which is to ensure land use regulations do not unduly restrict the use of alternative energy sources or sustainable construction techniques

The Project represents a low impact, non-residential type of development that does not require water use, does not generate wastewater, or increased local vehicular traffic once the Project is operational. Furthermore, Project visibility will be extremely minimal, with no significant visibility within 2 miles of the Project. The location and design of the Project are highly effective mitigation in terms of reducing Project visibility. Additional detail on Project visibility is provided in Section J.1 and Appendix 13.

Grid-Interconnection

It is critical for utility-scale solar projects to be sited within reasonable proximity to existing electrical infrastructure. Additionally, the existing infrastructure must be technically capable of receiving the new generation. Both of these attributes are satisfied at the Project site. The Project is sited directly adjacent to existing transmission infrastructure and will not require the development of new transmission lines. ISO-NE conducted a Feasibility Study to confirm available capacity. ISO-NE is also in the process of performing a System Impact Study to identify whether any line upgrades may be needed.

Availability of Privately-Owned Lands

The development of the Project required the use of privately-owned lands, and these landowners have taken an active interest in the development of their property for renewable energy purposes. Chinook Solar purchased an option to acquire up to 470 acres in fee from four landowners in Fitzwilliam. Chinook Solar also has a leasehold interest in a portion of one property, totaling approximately 43 acres.

Cultural Resources and Scenic Resources

The Project has been sited to avoid adverse effects on historical, archaeological, or architectural resources. The Project has also been sited to avoid adverse effects on scenic resources, with very minimal Project visibility due to local topography and existing environmental conditions, as described in Section J.1 below and Appendix 13.

H.2.a. Alternatives analysis

In addition to the above-mentioned factors that influenced the initial selection of the Project site, Chinook Solar considered several site-specific design configurations throughout the Project development process. These design alternatives examined potential Project impacts on wetlands and other natural resources, tree clearing, aesthetics, and overall efficiency of Project construction. Alternatives considered included various configurations of solar arrays, different models of panels, different quantities and models of inverters, and numerous access road

configurations to utilize existing access paths and reduce environmental impacts. The specific methods and measures used to minimize Project impacts to the greatest extent practicable are discussed below.

Configuration of Solar Arrays

Chinook Solar considered several alternatives to the final design of the solar arrays. The panel arrays were reconfigured over the course of numerous design iterations, and the Project footprint was reduced from approximately 190 acres to approximately 110 acres. Along with a reduced Project footprint, the amount of clearing associated with the Project has also decreased throughout various design iterations, from approximately 193 acres to approximately 129 acres.

In addition to the general reconfigurations of the Project layout, various design iterations have been evaluated to avoid and minimize impacts to natural resources to the greatest extent feasible. As such, portions of the original Project layout have been eliminated to achieve the following:

- minimize the number of wetland crossings needed;
- avoid and minimize Project work within Fitzwilliam's 75-foot wetland buffer; and
- maximize the distance between Scott Brook and the Project.

Scott Brook is an important resource in Fitzwilliam, although the wetland complex surrounding Scott Brook was not proposed as a Prime Wetland during the 2017 proposed Prime Wetland mapping (Town of Fitzwilliam, 2017). Nonetheless, in consideration of Fitzwilliam's ordinances and viewpoints, Chinook Solar has evaluated numerous Project layout options resulting in a final design that avoids and minimizes natural resource impacts and Fitzwilliam's 75-foot wetland buffer to the maximum extent possible. Within the 75-foot wetland buffer, the Project will require approximately 1.13 acres of tree clearing and approximately 0.77 acre of access roads.

Different Models of Panels and Ground Cover Ratio

Various models of solar panels were evaluated for efficiency, reliability, cost, spacing, and overall suitability within the constraints of the Project site. Conceptual Project plans initially consisted of 365-watt panels, whereas the final Project design is comprised of 405-watt panels. Higher wattage panels are more efficient, resulting in an optimized design consisting of fewer panels. By using higher wattage panels, Chinook Solar was able to reduce the Project footprint and minimize impacts, while achieving a 30-MW AC Project. It is important to note that while Chinook Solar anticipates using 405-watt panels, the type of panel used will depend on supply and availability at the time of construction.

During various design iterations, the ground cover ratio was increased, where feasible based on favorable topography. Increasing the ground cover ratio results in reduced spacing between the rows of panels, a more efficient use of available land, and less land needed to achieve the 30-MW Project threshold.

Substation Location

Due to site constraints such as topography, wetlands, and location of existing electric infrastructure, there were no viable alternatives for the location of the Substation.

Configuration and Design of Access Roads

The primary site access is located off Fullam Hill Road. This is the best location for site access due to an existing gravel road; therefore, an alternative primary site access point was not evaluated. Additional interior roads are required throughout the Project area to access Project equipment, particularly inverters and the Substation. Throughout the design process, Chinook Solar considered numerous configurations of these interior access roads. Due to timber harvesting within the Project area over the past several decades, there is an extensive network of existing logging roads in the Project land control area. During Project design, the goal was to use existing logging roads to the greatest extent possible to minimize impacts associated with constructing new access roads. Additionally, Project access roads were reconfigured during various design iterations to attain the most efficient routes for accessing the different Project areas. To further minimize Project impacts associated with access roads, the width of access roads was reduced from 15 feet during initial design phases to 12 feet for the final Project layout. The main access road to the Substation is 16 feet wide as access by larger vehicles will be required.

The southernmost solar array is separated from the rest of the Project by a wetland, as well as an intermittent stream flowing through portions of the wetland; therefore, a resource crossing is required for Project access. The initial Project was designed to avoid crossing the stream and to span the wetland at the narrowest point where the stream did not occur. This crossing location was thoroughly evaluated by wetland scientists and professional engineers. Spanning the wetland in this location would require a lengthy bridge span (approximately 48 feet) and a relatively steep approach on one side (approximately 6.7% slope), making construction difficult. After careful consideration, Chinook Solar decided to evaluate alternative resource crossing locations. An alternative location was selected and analyzed by wetland scientists and professional engineers. Although this alternative crossing would require spanning both the wetland and stream, construction of the crossing would be more feasible. In this location, the span length is approximately 40 feet and the maximum slope approach is approximately 4%. Additionally, Chinook Solar was able to design the span to completely avoid wetland and stream impacts; therefore, this alternative crossing location was selected for the final Project configuration.

H.3. Documentation that the Applicant has held at least one public information session in each county where the proposed facility is to be located at least 30 days prior to filing its application

A Public Information Session was held in Cheshire County in the Town of Fitzwilliam on July 18, 2019. A transcript of the Public Information Session is provided in Appendix 10. Notice of this was provided in accordance with Site 201.01.

H.4. Documentation that written notification of the proposed facility, including copies of the application, has been given to the governing body of each municipality in which the facility is proposed to be located and that written notification of the application filing has been sent via first class mail to the governing body of each of the other affected communities

The Fitzwilliam Select Board and Planning Board will be provided with copies of this Application at the time it is filed with the SEC in accordance with an agreement the Applicant reached with the Town consistent with the September 5, 2019 Order on Procedural Waiver Request. Chinook Solar will file a copy of the return receipt or other documentation of receipt by Fitzwilliam with the SEC, as well as copies of the letter sent via first class mail to the other affected communities and has reserved Appendix 11 for this purpose.

H.5. Information described in Sections 301.04 through 301.09

Table H-1. Application Information and Corresponding Section		
Site Section	**Content**	**Application Section**
Section 301.04	Financial, technical, and managerial capability	Section I
Section 301.05	Effects on aesthetics	Section J.1
Section 301.06	Effects on historic sites	Section J.2
Section 301.07	Effects on environment	Section J.3
Section 301.08	Effects on public safety	Section J.4
Section 301.09	Effects on orderly development	Section K

H.6. For a proposed wind energy facility, information regarding cumulative impacts

The Chinook Solar Project is not a proposed wind energy facility.

H.7. Information describing how the proposed facility will be consistent with the public interest

The proposed Project will serve the public interest as described herein. The New Hampshire legislature has determined that it is in the public interest to stimulate investment in low emission renewable energy generation technologies in New Hampshire (RSA 362-F:1). The Project advances critical legislative and public policy objectives to promote renewable energy technologies and reduce greenhouse gas emissions. Solar energy facilities do not generate any air or water pollution or greenhouse gases. Additionally, solar energy generation offsets carbon-based generation and directly reduces climate-altering carbon dioxide emissions, as described in the Greenhouse Gas Analysis Report contained in Appendix 15A.

The Project will produce enough clean energy to meet the annual energy consumption needs of approximately 7,000 average homes. Furthermore, by diversifying the energy mix in the region, the Project can help reduce the volatility of energy costs. The Project is also expected to provide a significant long-term benefit to Fitzwilliam. Chinook Solar is coordinating with Fitzwilliam with the goal of executing an MOU and a PILOT agreement.

As explained throughout this Application, the Project is optimally sited to ensure the Project will not have any unreasonable adverse effects. In addition, the Project will provide quantifiable benefits to the public on both a local and regional level.

H.8. Pre-filed testimony and exhibits supporting the Application

Pre-filed testimony and exhibits are provided in Section L of this Application and include the following:

- Heath Barefoot (Project Director)
- Joseph Balzano (financial)
- Paul Callahan (engineering and construction)
- Dana Valleau and Kara Moody (environmental and permitting consultants)
- Joseph Persechino (engineering and stormwater consultant)
- Michael Buscher (visual consultant)
- Marc Wallace (sound consultant)
- Karen Mack (archaeologist)
- Stephen Olausen (architectural historian)
- Matthew Magnusson (economist)
- Lise Laurin (sustainability consultant)

I. FINANCIAL, TECHNICAL, AND MANAGERIAL CAPABILITY

I.1. Financial Information

Chinook Solar is an LLC organized for the development and ownership of this Project. It is indirectly owned by a subsidiary of NextEra Energy Capital Holdings, Inc. (NEECH).

I.1.a. Description of the Applicant's experience financing other energy facilities

While Chinook Solar has no direct experience financing other energy facilities, NEECH has extensive experience. NEECH's wholly owned subsidiary NEER, through its subsidiaries, owns, develops, constructs, manages, and operates electric-generating facilities in wholesale energy markets primarily in the U.S., as well as in Canada and Spain. NEER, with approximately 21,000 MW of total net generation capacity as of December 31, 2018, is one of the largest wholesale generators of electric power in the U.S., with approximately 20,700 MW of net generating capacity across 36 states, and has 500 MW of net generating capacity in 4 Canadian provinces and 99.8 MW of net generating capacity in Spain. As of December 31, 2018, NEER operates facilities with a total generating capacity of 23,500 MW. NEER produces the majority of its electricity from clean and renewable sources. NEER is the largest generator of renewable energy from the wind and sun based on 2018 MW hours produced on a net generation basis. NEER also owned and operated approximately 185 substations and 1,135 circuit miles of transmission lines as of December 31, 2018.

I.1.b. Description of the corporate structure of the Applicant

The corporate structure of Chinook Solar is depicted on Figure I.1, which reflects the organizational structure as of August 21, 2019.

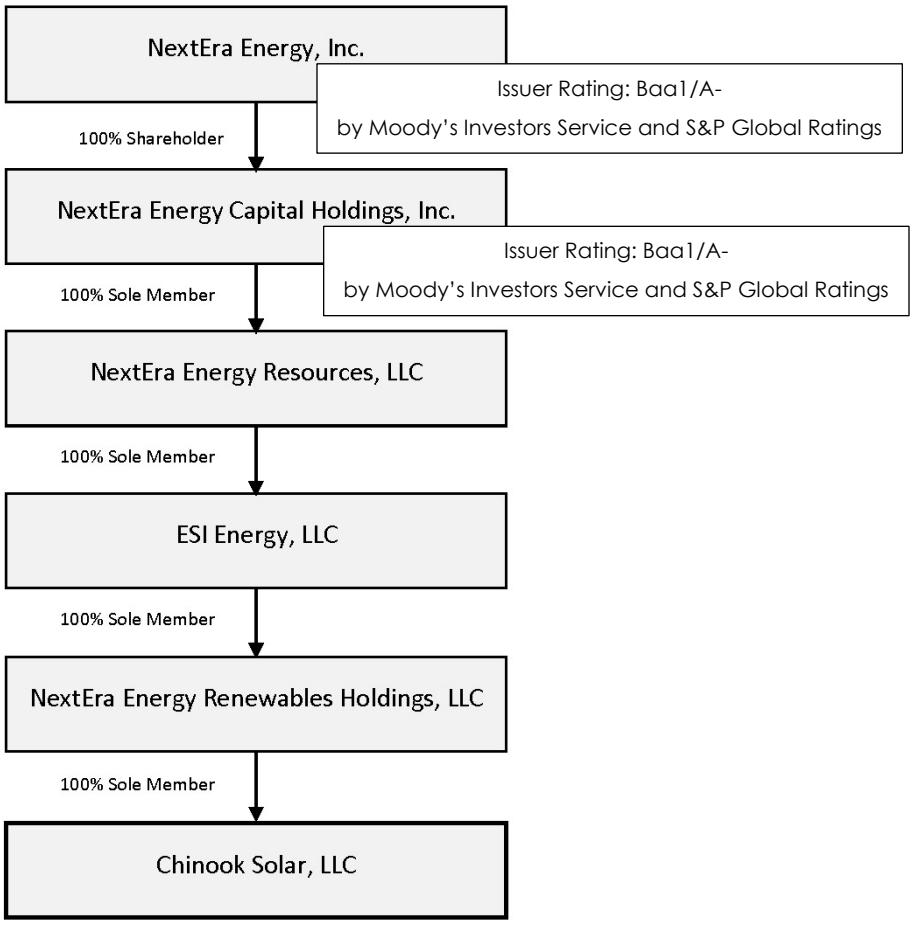

Figure I.1. Corporate Structure of Chinook Solar

I.1.c. Description of the Applicant's financing plan for the proposed facility

NEECH, the anticipated provider of initial funding for the proposed Project, is a wholly owned subsidiary of NextEra Energy, Inc. (NextEra) and holds ownership interests in and provides funding for NextEra's operating subsidiaries other than Florida Power and Light Company (FPL), Florida City Gas and Gulf Power Company, its rate-regulated electric utilities. NEECH's unsecured long-term credit/debentures rating is Baa1 (Stable) and BBB+ (Stable) by Moody's Investors Service, Inc. and S&P Global Ratings, respectively. NextEra's 2018 Annual Report is included in Appendix 12A.

As of December 31, 2018, NEECH had approximately $4.2 billion of net available liquidity, primarily consisting of bank revolving line of credit facilities, letter of credit facilities, cash and cash equivalents, less letters of credit issued under the credit facilities. Moreover, as of December 31, 2018, 66 banks participate in NEECH's revolving credit facilities.

The ability to develop, construct, or operate the Project is not continent on external financing. The Project's financial requirements are capable of being met through capital funding from its indirect corporate parent, NEECH. It is anticipated that internally generated funds from NEECH will be utilized to contribute equity to the Project during the construction period and then limited or non-recourse financing will be obtained at or after the Project's commercial operation date. As an

option, Chinook Solar may secure construction financing prior to commercial operation if market conditions are advantageous.

External financings are normally issued at a stand-alone, project-entity level or at a portfolio/holding entity level depending upon financing needs. The financing structure of projects are normally a mixture of debt and equity with the debt funding provided by banks or private placement investors on a limited or non-recourse basis. As the owner of the Project, Chinook Solar may obtain additional equity sponsor(s) for the Project at its discretion and if necessary.

I.1.d. Comparison of Applicant's financing plan compared with financing plans employed by the applicant or its affiliates

Chinook Solar's plan for financing the Project is consistent with the financing plans employed by Chinook Solar's affiliates.

I.1.e. Current and pro forma statements of assets and liabilities of the Applicant

A statement of assets and liabilities of Chinook Solar is provided in Appendix 12B.

I.2. Technical Information

I.2.a. Description of the Applicant's qualifications and experience in constructing and operating energy facilities

Chinook Solar is an indirect, wholly owned subsidiary of NEER. NEER's parent company, NextEra, is one of the largest wholesale generators of electric power in North America. NextEra, through its subsidiaries, has been involved in the renewable energy industry for over 30 years, and NEER is a leading clean energy company with approximately 20,700 MW of net generating capacity in operation. NEER produces most of its electricity from clean and renewable sources and is the global leader in producing electricity from the wind and sun, with over 13,000 MWs fueled by wind energy and over 2,300 MWs from solar energy. A Fortune 200 company and included in the S&P 100 index, NextEra has often been recognized by third parties for its efforts in sustainability, corporate responsibility, ethics and compliance, and diversity.[1]

NEER has a proven track record of bringing large solar projects through permitting, construction, and ultimately delivering power to market. The Project team for Chinook Solar brings these capabilities along with local, New Hampshire-based regulatory and natural resources expertise to support the development of this Project within the regulatory framework set by the SEC.

NEER has a long-standing presence in New England, with extensive development and operational experience in the region. NEER, through its subsidiaries, owns and operates several generation facilities in New England, including the recently constructed Coolidge Solar Project in Ludlow, Vermont, which began commercial operation in December of 2018. The Coolidge Solar Project is the largest solar project to be permitted and constructed in Vermont. Additionally, another NEER project, Sanford Airport Solar, the largest solar project to be permitted in Maine, is anticipated to begin commercial operations in the fall of 2020.

[1] Information available online at: http://www.nexteraenergy.com/company/awards.html

Table I-1. NEER Facilities Operating in New England				
Project Name	**Fuel Type**	**Location**	**Gross MW**	**Net Ownership MW**
Coolidge Solar	Solar	Ludlow, VT	20	20
Connecticut, Maine, Massachusetts	Small-scale Solar	CT, ME, and MA	21	21
Casco Bay	Energy Storage	Yarmouth, ME	16	16
Minuteman	Energy Storage	North Reading, MA	5	5
Bellingham	Natural Gas	Bellingham, MA	311	155
Seabrook	Nuclear	Seabrook, NH	1,250	1,103
Wyman 1-3 and Cape	Oil	Yarmouth and South Portland, ME	250	250
Wyman 4	Oil	Yarmouth, ME	613	517
		Total	**2,481**	**2,069**

I.2.b. Description of the experience and qualifications of any contractors or consultants engaged by the applicant to provide technical support for the construction and operation of the proposed facility

The Project team assembled for Chinook Solar brings national capability and local expertise together to support the development of the Project. The Project team is highly qualified with extensive experience in developing, permitting, constructing, managing, and operating solar power projects in the northeastern United States and across the country. Chinook Solar is supported by NEER's technical staff and a team of local and regional experts.

The Project team was selected based on their extensive experience and local expertise and is comprised of the following consulting firms:

- TRC: comprehensive Project management, natural resource surveys, permitting, Project design support, and cultural resource review;
- Tighe & Bond: site / civil engineering and stormwater design;
- MHF Design Consultants, Inc.: land survey and legal descriptions;
- Eastern Topographics: topographic survey;
- Terracon: geotechnical engineering support;
- T.J. Boyle Associates, LLC: visual assessments;
- Tech Environmental, Inc: sound assessment;
- MSE Engineering: AC components, substation, and interconnection design;
- The Public Archaeology Laboratory: historical resource review;
- Basswood Environmental LLC: natural resource surveys;
- Tetra Tech, Inc.: bat survey;
- Gove Environmental Services, Inc.: site-specific soil survey mapping;
- EarthShift Global LLC: greenhouse gas life cycle assessment; and
- Seacoast Economics: economic impact assessment.

A Project organization chart is provided as Figure I.2. Biographical sketches of Key Project Personnel are included below, and additional biographical sketches or resumes will be provided if/as requested.

Chinook Solar, LLC

Heath Barefoot, Project Manager - Renewables Development

Heath Barefoot is a Project Director with NEER, where he manages early and late-stage renewable and energy storage development projects in New England with a focus on federal, state, and local permitting. Heath was also a business manager for NEER power generating assets in New England and managed deals for full requirements power supply. He holds a Bachelor of Arts degree in Economics from Duke University and joined NextEra in 2012 with 14 years of prior financial services industry experience.

Isabel Johnson, Environmental Services Project Manager

Isabel Johnson is a Project Manager in the Environmental Licensing and Permitting team in NEER's Environmental Services Department. Isabel has over 40 years of experience in the environmental field. She is responsible for environmental support and permitting of energy projects in New England, including transmission, solar and wind technologies. As Project Manager, she supports developers with project siting, environmental scope development, permitting, scheduling, and agency/public interaction. She has recently completed permitting of three solar projects in Maine totaling 90 MW. Isabel is also a member of NextEra's EMF technical team. Isabel has led environmental teams conducting environmental studies and has participated in permitting of energy-related projects throughout North America. She has also been involved in project development in Peru, Venezuela, Puerto Rico, Canada, Guinea Bissau and Italy. Isabel earned a Bachelor of Science in Zoology from the University of Florida and a Master of Science in Biology (with an emphasis on aquatic biology) from the University of West Florida. She held a Courtesy Scientist appointment with the Center for Environmental and Human Toxicology at the University of Florida for over 15 years.

Paul Callahan, Director Project Engineering, Engineering & Construction

Paul Callahan joined NextEra in 1988 and has managerial responsibility for engineering design of utility-scale solar projects. In this role, Paul establishes design criteria for solar projects, supports the procurement of major power plant equipment, and oversees the engineering activities during the development, design, and construction phase of solar project development. He has held this position since 2015. Prior to this role, he has held various engineering and project management positions within NextEra and has experience with many types of generation including fossil, nuclear, and solar facilities. Paul holds a Bachelor of Science degree in Civil Engineering from Virginia Tech and is a registered Professional Engineer in the State of Florida.

Dave Cook, Senior Project Manager – Engineering and Construction

Dave Cook is a Senior Project Manager with responsibility for early-stage solar project management. Project management responsibilities have included initial project site evaluation, preliminary engineering oversight, procurement of equipment and construction services, and support of project development and permitting activities. Dave has nearly 30 years of experience in various roles in the power generation industry and has successfully managed utility-scale projects throughout the U.S.

Eduardo (Ed) De Varona, Executive Director – Transmission Business Management

Ed De Varona is Executive Director in the Transmission Business Management organization within NEER. In this role, Ed coordinates all aspects of the interconnection process to ensure successful integration of the NEER wind and solar assets on the nation's electrical grid. This entails ensuring comprehensive electrical modeling and negotiating interconnection agreements with transmission owners and independent system operators as well as supporting the NextEra development activities in multiple interconnections. Prior to this role, Ed has served in a variety of leadership roles with NextEra affiliate FPL where he served for over 26 years in functional areas including Transmission Operations, Control Center Operations and Emergency Preparedness. Ed received a Bachelor of Science in electrical engineering from the University of Florida in 1994 and is a graduate of NextEra's Leadership Development Program.

John Hayden, Principal Project Engineer – Solar Engineering and Construction

John Hayden is a Principal Project Engineer within NEER's Engineering and Construction group. John is responsible for engineering and project management for the design and construction of utility-scale solar photovoltaic power plants. John's responsibilities begin at the solar facility's early stage of development and continue until the facility is designed, constructed, and turned over the operations staff. He has successfully completed 17 solar power plants totaling 1,800 MW of installed capacity.

Consulting Team

Dana Valleau, Chinook Solar Project Manager

Dana Valleau is a Project Manager and Environmental Scientist at TRC with nearly 25 years of experience. Dana has successfully managed numerous large energy projects throughout New England and the mid-west. He also has extensive experience in environmental permitting and has helped secured permits for several energy projects, including a project reviewed by the SEC. As such, he is experienced with the SEC process and has prepared testimony and participated in hearings.

Joseph Persechino, Consulting Civil Engineer

Joseph Persechino is a senior project manager who specializes in the development, design, and engineering of renewable energy projects throughout New England. His experience on renewable energy projects ranges from project initiation and site evaluations to comprehensive site/civil design and permitting. He has successfully acquired necessary permits for a range of renewable energy projects at the local, state, and federal level. In addition to his renewable energy work, he has more than 16 years of experience in civil engineering, site design, permitting and construction for various commercial, roadways, healthcare, municipal, government, and educational projects. Joseph advocates sustainability and Low Impact Design (LID) whenever possible.

Karen Mack, Principal Archaeologist

Karen Mack has 25 years of cultural resources management experience and currently serves as Office Manager and Principal Archaeologist out of TRC's Ellsworth Maine office. She serves as Principal Investigator and Director of field investigations, data analysis and report writing for all levels of investigation: Phase I – III. Her work also Includes developing sensitivity models for large- and small-scale development project such as solar developments, wind farms, natural gas pipelines, transmission lines and hydroelectric relicensing projects. Karen has worked throughout

New England and New York; she has conducted projects ranging from initial resource identification survey to intensive data recovery, both at coastal and interior locations. In addition to development and licensing projects, she has extensive expertise in the identification and evaluation of cultural resources within solar development projects. Karen has successfully managed projects possessing challenging logistics in remote locations. She has prior experience directing archaeological surveys for the National Park Service and other federal and state agencies. She has worked regularly with the regional State Historic Preservation Office staff members on a variety of federal and state compliance projects and has an excellent knowledge of the archaeology of the Northeast.

Stephen Olausen, Executive Director/Senior Architectural Historian

Stephen Olausen is the Executive Director and a Senior Architectural Historian at PAL in Pawtucket. He has a Master of Arts in Public History from the University of South Carolina and has worked in the field of cultural resource management since 1985. Stephen has extensive experience in managing projects that require review under state and federal historic preservation laws, including the National Historic Preservation Act of 1966, Section 4(f) of the Department of Transportation Act, and the National Environmental Policy Act. His work has included studies for major projects in the areas of transportation; wind, hydroelectric, and carbon-based electrical generation; electrical and natural gas transmission; military; civil engineering; and private development projects.

Michael Buscher, Visual Consultant

Michael Buscher is a professional landscape architect in the state of Vermont and the owner of T.J. Boyle Associates, landscape architecture and planning. Michael has managed numerous aesthetic and visual impact studies for energy projects throughout New England and the eastern united states. He regularly provides expert testimony before local and state permitting agencies. Michael's experience includes providing aesthetic impact review services for the New Hampshire Counsel for the Public and provided testimony before the SEC.

Marc Wallace, Noise Consultant

Marc Wallace has 32 years of experience as a noise consultant at Tech Environmental, providing permitting assistance, strategic planning, monitoring, modeling and impact assessment to municipalities, government agencies, and industry on projects in the transportation, wastewater and solid waste disposal and industrial market sectors. Marc's noise experience spans decades and versions of acoustic models. He has extensive experience in performing ambient and sound-source compliance monitoring over his career. Marc often presents the results in public forums, and his multi-decade experience allows him to present detailed and sophisticated results in a simple and easy to understand format.

Matthew Magnusson, Economics Consultant

Matthew Magnusson is Principal of Seacoast Economics. He is a graduate of the University of New Hampshire Peter T. Paul School of Business and Economics with a Master of Business Administration. He also earned a Master of Computer Science from Georgia Institute of Technology. Relevant recent research experience includes economic modeling for a study sponsored by the Natural Resources Defense Council and Protect Our Winters: "Climate Impacts on the Winter Tourism Economy in the United States;" "New Hampshire's Green Economy and Industries: Current Employment and Future Opportunities" performed for the Rockingham Economic Development Committee; "Economic Impact of Granite Reliable Power Wind Power Project in Coos County, New Hampshire" performed for Granite Reliable Power, LLC; and the economic analysis of policies

proposed in "The New Hampshire Climate Action Plan" performed for the New Hampshire Climate Change Task Force.

Lise Laurin, Greenhouse Gas Consultant

Lise Laurin is a pioneer in Sustainable Return on Investment (S-ROI) and Life Cycle Assessment (LCA). She founded EarthShift Global in 2000, adopting these methodologies to support North American industries' early efforts at sustainability. Lise continues to develop and leverage EarthShift Global's training, simplified LCA tools and S-ROI tools to build organizational capacity and drive large-scale change. Her unique skillset and knowledge base have put her in demand globally by companies, organizations, and governments. Under Lise's guidance, the technical team at EarthShift Global produces high-quality, high-value assessments for a range of clients. She also directs EarthShift Global's software development and support and teaches advanced training courses in LCA, social impact assessment, and S-ROI. Lise has overseen 10 different studies on the greenhouse gas impacts of utility grade solar installations and has submitted testimony twice on behalf of those studies.

Figure I.2. Project Organization Chart

I.3. Managerial Information

I.3.a. Description of the Applicant's management structure for the construction and operation of the proposed facility

Chinook Solar will be responsible for the overall management of the Project, including the execution and administration of all commercial agreements necessary to ensure that the Project is constructed and operated in conformance with accepted industry practices and the Certificate of Site and Facility. As the owner, Chinook Solar will be ultimately responsible for the management of all contractors engaged to construct and operate this facility. Chinook Solar is committed to constructing and operating the Project to achieve the highest standards for safety, reliability, and performance.

Chinook Solar will have a construction team on-site to handle materials, construction, and quality control. The construction Contractor(s) will manage subcontractors to complete all aspects of construction. Throughout construction, ongoing coordination will occur between the Project development and construction teams. Chinook Solar will maintain a full-time, on-site construction manager to collaborate with the construction Contractors daily. The on-site construction manager will help coordinate all aspects of the Project, including ongoing communications with local officials, citizens, and landowners. The on-site construction manager will also maintain the following responsibilities including, but not limited to: safety and environmental performance; schedule, cost, and quality performance; plan of the day; overall Project direction; and construction Contractor guidance and quality control.

The on-site construction manager will maintain full authority and responsibility for the construction Contractors, all subcontractors, and associated quality control measures. In addition to the on-site construction manager, there will be several personnel with various accountabilities to ensure timely, safe, and efficient use of resources and labor. All supporting personnel will have specific responsibilities related to the Project. Below is a list of the anticipated supporting personnel and their accountabilities in relation to the Project.

- **Project Engineer**: provides technical and performance oversight of the engineering team's supporting design of the Project; monitors any deviations from design requirements and reports on effects to the Project.
- **Project Controls**: tracks cost controls, risks, and capital forecasting in relation to the Project; monitors any updates to the Project schedule and reports on effects to the Project.
- **Civil/Environmental Coordinator**: interfaces with permitting to ensure all requirements have been met; identifies and resolves any deficiencies; provides review and quality assurance of work in accordance with design standards; oversees compliance with environmental requirements.
- **Electrical Coordinator**: coordinates and monitors electrical contractor's work.
- **Logistics and Materials Coordinator** ensures the efficient delivery of Project equipment and materials on-site and in accordance with the Project schedule.
- **Site General Support**: assists and supports all personnel.
- **Operations Plant Lead and Start-up Operations Transition**: ensures a quick, safe, and efficient transition from the construction team to the operations team; ensures the end of construction and transition into commissioning activities is completed smoothly.

Chinook Solar and all contractors and subcontractors will maintain the highest quality controls during the development, construction, and operation of the Project. Chinook Solar will have a team of personnel in place, as listed above, to maintain the daily operation and quality of Project construction. Additionally, the construction Contractors will maintain documentation, conformance, inspection, and testing of all work completed on-site to ensure that all work has been complete in accordance with Project specifications. The comprehensive quality oversight of Chinook Solar's team will ensure that all work adheres to the highest quality and safety metrics.

The Project will be constructed according to all plans, designs, manufacturer specifications, engineering standards, contract standards, and expectations. Regular alignment meetings with Chinook Solar and the construction Contractors will occur to assure that all expectations are being met. Additionally, testing and inspections will assure that quality standards and expectations are being met. The construction Contractors will deliver the Project components taking precautions to ensure that all employees and the general public stay safe through the duration of construction.

Once the Project is operational, NextEra's Renewable Operation Command Center (ROCC) will be used to optimize performance and monitor and control the Project's operations. The ROCC will be responsible for monitoring the generation status and controlling the Project substation equipment. The ROCC is staffed with North American Electric Reliability Corporation Certified Transmission System Operators 24/7/365. The ROCC provides remote access to Digital Fault Recorders and protective relay records to allow real time analysis of outages and abnormal conditions. In addition, regional operations and maintenance staff will provide periodic Project inspections and perform or provide oversight of maintenance activities.

I.3.b. Description of the qualifications of the Applicant and its executive personnel to manage the construction and operation of the proposed facility

Michael (Mike) O'Sullivan - Senior Vice President, Development

Mike O'Sullivan is Senior Vice President of Development at NEER. Mike has spent 35 years working in the energy sector in the U.S. and Canada, including 16 years with NEER and its affiliates. He received his Bachelor of Science in Civil Engineering from the University of Notre Dame and earned a Master of Business Administration from the University of Chicago. In his current role, Mike is responsible for overseeing NEER's generation project development efforts, including for wind and solar in North America. Under Mike's leadership, NEER has developed approximately 13,000 MW of wind and 2,000 MW of solar generating facilities.

John DiDonato - Vice President, Development and Origination

John DiDonato is Vice President of Development and Origination for NEER. Since 2000, John has developed and acquired over 3,300 MW of generation projects for NEER. He has led development and negotiated the power purchase agreements for wind projects in the central U.S. totaling over 2,700 MW and the 680 MW Calhoun Energy Center, a gas fired simple cycle facility located in Oxford, Alabama. These projects represent a total investment of over $4 billion in electric generation assets utilizing wind and clean natural gas technologies. John has a bachelor's degree in Accounting from Kent State University and a master's degree in Accounting and Tax from Florida Atlantic University. He joined NextEra in 1996 as International Tax Manager. In 2000, he joined NextEra's Business Development Team, and since then he has been involved with myriad energy development projects throughout the U.S. He and his team are currently responsible for the development and acquisition of wind energy facilities in the Central U.S. Previously, he was with Sensormatic Electronics Corporation; a security company based in Boca Raton, Florida. While at Sensormatic, he worked in their London office on international tax matters.

William Yeager - Executive Vice President, Construction and Integrated Supply Chain

William Yeager joined NextEra in 1982 and has managerial responsibility for corporate-wide power plant engineering, construction, and sourcing activities. William holds a Bachelor of Mechanical Engineering degree from the Georgia Institute of Technology and a Master of Business Administration from the University of South Florida. He has 34 years of Planning and Construction experience with wind and solar generating facilities that qualify as Similar or Comparable Facilities. William also has experience in gas generation facilities.

Ronald Reagan - Vice President, Engineering and Construction

Ronald Reagan is Vice President of NextEra's Engineering and Construction Division. He is responsible for leading the engineering and construction activities of NextEra's generation fleet. Ronald was named to this position in November 2018. He has also served as NextEra's Vice President of Integrated Supply Chain and Vice President of Procurement and Materials Management. In 2006, he joined the Power Marketing Unit of NEER, serving as Vice President of Asset Operations and Trading. Earlier, Ronald served in the Business Management Organization with responsibility for several wind, solar, hydroelectric, and natural gas assets. He joined FPL in 1990 and held operational and managerial positions in the Power Generation Division. Ronald holds a Bachelor of Science in Electrical Engineering from Clarkson University.

Miguel Arechabala - Executive Vice President, Power Generation Division

Miguel Arechabala joined FPL in 1981. He received his Bachelor of Science degree in mechanical engineering from the University of Miami and his Master of Science degree in engineering management from the University of South Florida. He is also a certified Six Sigma Black Belt. Throughout the years he has held various positions within NextEra companies and has experience with all types of generation including natural gas, nuclear, hydro, wind, and solar facilities. Miguel has held his current position, Executive Vice President, Power Generation Division since January 2014 and has managerial responsibility for operating all types of generation projects. He has 35 years of power generation operating experience.

I.3.c. Description of the experience and qualifications of the contractors and consultants for construction and operation of the proposed facility

Construction contractors, including the EPC general contractor, have not yet been selected for the Project. However, the Project's indirect parent company, NEER, has extensive experience selecting and working with many of the leading engineering and construction companies in North America. Under close supervision of Chinook Solar's management team, the EPC general contractor will be responsible for managing the construction of the Project. The EPC general contractor scope will include all technical and construction services required to complete and turn over a fully commissioned and operational project within designated cost, schedule, quality, and safety requirements. The EPC general contractor will provide an effective organizational structure to ensure a responsible construction team with a commitment to quality and safety. This effective structure will contain appropriate personnel to facilitate the construction of the Project including managers, engineers, superintendents, inspectors, foremen, and quality personnel. Each employee has the responsibility to implement all quality processes in every aspect of the construction process. All non-conforming work with the established level of quality and Project specifications will be corrected in an appropriate manner. With respect to selection and supervision of the construction Contractors, the standards and methods will be consistent with those implemented by other wholly owned subsidiaries of the Project's indirect parent, NEER, which has led to the successful development of more than 20,000 MW of operating assets.

J. POTENTIAL HEALTH AND ENVIRONMENTAL EFFECTS AND MITIGATION PLANS

J.1. Aesthetics

Chinook Solar engaged T. J. Boyle Associates to perform a Visual Impact Assessment (VIA) for the Project. The VIA concluded the Project will not result in an unreasonable adverse effect on the aesthetics of the surrounding area. The VIA report is contained in Appendix 13.

Prior to conducting the VIA, the area of potential visual impact for the Project was defined via a desktop review to determine the appropriate geographic area for the computer-based visibility analysis. During this review, it was determined that the furthest scenic resource with significant potential visibility of the Project was Mount Monadnock, nearly 6 miles from the Project. Therefore, a distance of 6 miles from the Project was set as the geographic scope of the VIA.

Four distinct methods of investigation were implemented to complete the VIA for the Project:

1) Background data collection - included compiling standard data that can help describe the landscape within the Project and the surrounding area, as well as identification and classification of scenic resources.

2) Viewshed analysis mapping - examined the potential visibility of the Project by applying a line-of-sight method from prescribed points representing the Project to all other locations within the study area. The viewshed analysis was portrayed as two types of viewshed maps: terrain viewshed and vegetated viewshed. These viewshed maps were used to focus the field investigation on areas most likely to have views of the Project.

3) Field investigation - areas of potential Project visibility were verified and photographs of the views toward the Project from these areas, as well as other sensitive areas, were taken. The landscape's visual character was also photographically documented.

4) Project visualization - photographic simulations were created to help evaluate the potential visual impacts of the Project.

Potential scenic resources identified within the 6-mile study area around the Project conservatively totaled 1,277. Of these potential scenic resources, 542 were identified as visible based on the terrain viewshed analysis and 54 were identified as visible based on the vegetated viewshed analysis. Although numerous potential scenic resources occur within 6 miles of the Project, the potential for visibility is only 40% based on the terrain viewshed analysis and 4% based on the vegetated viewshed analysis. Scenic resources with potential visibility of the Project were reviewed through a combination of field investigation and desktop review to confirm visibility, and a systematic evaluation of scenic resources determined to have the highest potential for visibility was performed.

The VIA determined that the location and design of the Project are highly effective mitigation in terms of reducing Project visibility, as summarized below:

- The Project location is set back from nearby roads and properties;
- The array layout and associated equipment incorporates adequate buffers to retain existing mature vegetation that will screen the Project from surrounding scenic resources;
- The Project is located adjacent to existing electrical transmission infrastructure, thereby eliminating the need for long interconnection lines; and

- The Project equipment is low in profile, allowing vegetation to effectively screen views from most of the surrounding area.

The VIA concluded that Project visibility would be extremely minimal, with no significant visibility within 2 miles of the Project. Other than visibility from Mount Monadnock, only isolated views were identified throughout the remainder of the study area, and the analysis determined the Project would not result in unreasonable adverse impacts to the aesthetics of these areas.

The most substantial area of visibility is from the summit and surrounding area of Mount Monadnock. Careful evaluation determined the Project will not be a prominent element within these views, and the scope and scale of change in the visible landscape will be low. Distance substantially mitigates potential impacts from Mount Monadnock. An intercept survey conducted from the summit found that the Project would not impact visitors' expectations, enjoyment, or future use of Mount Monadnock. The results of the intercept survey are contained in Appendix E of the VIA report provided in Appendix 13.

J.2. Historic Sites

The Project will not adversely impact any known archaeological sites. A Phase IA and Phase IB Archaeological Assessment were conducted by TRC archaeologists in accordance with the guidelines established by the NHDHR. The Phase IA assessment included a review of NHDHR site files and reports, followed by a desktop review of the sites identified during the file review to examine precontact period and historic period archaeological sensitivity for the Project area. Following the desktop review, a Phase IA walkover survey of the entire Project area was performed on November 14-15, 2017. Based on the research, desktop review, and field reconnaissance, five general areas with precontact period archaeological sensitivity were identified, along with one area of historic period archaeological sensitivity.

The Phase IA Archaeological Assessment report was filed with the NHDHR on January 25, 2018, and a copy of the report is provided in Appendix 14A. The findings contained in the Phase IA report concluded that subsurface testing was necessary to evaluate the archaeologically sensitive areas identified during the Phase IA assessment. The NHDHR concurred with the proposed subsurface testing to be performed during a Phase IB Archaeological Assessment on February 7, 2018. A copy of the concurrence memo received from the NHDHR is provided in Appendix 14B.

A Phase IB Archaeological Assessment was conducted to investigate the archaeologically sensitive portions of the Project's area of potential effects (APE). During the Phase IB field survey, subsurface testing was performed in the precontact period and historic period areas identified during the Phase IA assessment. No cultural material or archaeological sites were identified in the precontact period test areas. Two historic period sites (two homesteads) were identified within the historic period test area, as well as a quarried boulder. Neither homestead was recommended as being eligible for the National Register of Historic Places. No cultural material was recovered from the subsurface testing in the boulder vicinity.

The Phase IB Archaeological Assessment report was filed with the NHDHR on September 10, 2018. On September 21, 2018, the NHDHR verbally requested a few minor revisions to the report. These requested revisions were incorporated into the Phase IB report. The final Phase IB Archaeological Assessment report was filed with the NHDHR on October 31, 2018, and a copy is provided in Appendix 14C. The findings contained in the Phase 1B report concluded no further archaeological investigations were needed for the Project. The NHDHR concurred with the Phase IB assessment on December 3, 2018, and a copy of the concurrence memo received from the NHDHR is included in Appendix 14D.

The Project will not physically alter any existing historic buildings or structures. The Public Archaeology Lab (PAL) reviewed all available information about previously identified historic properties and completed field studies to evaluate the potential impacts of the Project on historic resources. Studies were conducted in accordance with the NHDHR guidelines. PAL recommended a study area consisting of a 2-mile radius around the Project, and the NHDHR concurred with this recommendation. A copy of the correspondence with the NHDHR demonstrating their concurrence is contained in Appendix 14E.

The historic resource evaluation was conducted to provide background on previously inventoried and listed historic properties; discuss historic contexts and associated resource types; and recommend individual properties and/or areas for additional survey. PAL reviewed all available information about previously identified historic properties within the study area, including the National Register of Historic Places (National Register) nomination for the Fitzwilliam Common Historic District. A list of previously inventoried or evaluated properties was obtained from the NHDHR; however, the inventory forms on file at the NHDHR were in the process of being scanned and not available for review on January 30, 2019. PAL also acquired pertinent information from the Fitzwilliam Public Library and Fitzwilliam Historical Society, as well as other local and state repositories and websites.

Field research included a thorough visual assessment of all potential historically significant structures within the study area, as well as photographic documentation and completion of historic inventory forms. Preparation of the Project Area Form resulted in the identification of one resource within the study area that was previously listed in the National Register, one resource previously listed in the Individual National Register, and one resource previously determined eligible for National Register listing. These are the Fitzwilliam Common Historic District, the Third Fitzwilliam Meetinghouse, and the Daniel Spaulding House/Town Library, respectively. Seven other previously identified resources occurred within the study area, including the Fitzwilliam Village Local Historic District, which is classified as a Local Historic District. Background review and field research identified 74 other resources not yet inventoried within the study area. A copy of the NHDHR Project Area Form is provided in Appendix 14F. The NHDHR reviewed the Project Area Form and concluded that an Assessment of Effects analysis was necessary for the Fitzwilliam Common Historic District. The NHDHR response letter regarding the Project Area Form is contained in Appendix 14G.

No buildings or structures will be acquired, physically altered, or removed by the Project. Thus, any impacts from the Project would be limited to those indirectly resulting from Project visibility. During the assessment of effects phase, the Project was determined to have no direct or indirect effects on the Fitzwilliam Common Historic District. Lack of Project visibility, based on the visual analyses prepared for the Project, contributed to this determination, as topography and vegetation limit visibility of the Project site. The Determination of Effects Form is provided in Appendix 14H. The Determination of Effects Form was submitted to the NHDHR on July 25, 2019. The NHDHR concurred with the finding of no historic properties affected on July 29, 2019, and a copy of the concurrence memo received from the NHDHR is included in Appendix 14I.

J.3. Environment

J.3.a. Air quality

The Project will not generate air emissions once constructed; therefore, the Project will not have an adverse impact on local air quality. As a source of clean, renewable energy, the Project will reduce reliance on fossil fuel electric generation facilities that emit pollutants. Increasing solar

energy into the electrical supply system reduces harmful air emissions and results in higher air quality while also helping to reduce the risk of climate change.

A greenhouse gas analysis was performed for the Project to quantify the reduction in greenhouse gas emissions to the atmosphere as a result of operation of the Project. The Project will add electric generation capacity from a renewable source, as opposed to adding generation capacity via conventional fossil fuels. The greenhouse gas analysis modeled two means of adding electric capacity (the Chinook Solar Project and a natural gas power plant) to estimate the relative life cycle greenhouse gas emission of each option and quantify the potential greenhouse gas emission benefits of the Project. Results of the greenhouse gas analysis indicate a substantial reduction in greenhouse gas emission of 84-91% could be achieved over the 30-year Project life when compared to adding natural gas generation capacity. The complete greenhouse gas analysis report is provided in Appendix 15A.

J.3.b. Water quality

The Project will not have an impact on regional water quality. Potential sources of water quality impacts include erosion and sedimentation during tree clearing and Project construction. The Project is designed to meet the standards set forth in the NHDES AoT permit application, which is included in Appendix 4. The Project has been designed to minimize the likelihood of erosion and subsequent sedimentation.

Project Location

The Project is located in the Miller Watershed (HUC 8: 01080202) and the Priest Brook (HUC 12:010802020102) and Torbell-Millers River (HUC 12:010802020103) subwatersheds. Topography within the Project area generally trends to the west and south towards Scott Brook or to the southeast toward Sip Pond and Millers River along this divide. Headwater wetlands and streams located along shallow swales and concave slopes east of the watershed divide drain south and off-site to Sip Pond and Sip Pond Brook. West of the watershed divide, lands slope steeply to an expansive forest-shrub wetland complex bordering Scott Brook. In addition, several wetlands, vernal pools, and intermittent and ephemeral streams were identified on site during natural resources surveys performed by TRC and Verdanterra from 2016 through 2019.

Erosion and Sedimentation Control

BMPs will be employed prior to and during clearing and construction to limit the mobilization of sediments from cleared surfaces. The Project design includes BMPs based on consultation with the NHDES AoT Bureau, the New Hampshire Stormwater Manual, and the NHDES Alteration of Terrain Bureau Stormwater Design Guidance for Large Scale Solar Arrays (January 2019) (NHDES Solar Guidance). BMPs will include both temporary and permanent measures. Temporary erosion and sediment control practices to be implemented during Project construction include stabilized construction exits, silt socks and silt fence, mulching and temporary seeding, check dams and level spreaders, sedimentation basins, and erosion control matting. Permanent stabilization practices to be implemented prior to the completion of construction include level spreaders constructed in areas per the NHDES Solar Guidance, detention basins, and swales.

Erosion and sediment control (ESC) devices will be monitored frequently to ensure they are working properly; this will occur at least once a week or following rain events of more than 1/4 inch of rain, in compliance with the United States Environmental Protection Agency's (USEPA) regulations. Corrective measures will be implemented as soon as possible if any ESC devices are

performing inadequately. The BMPs and ESC devices that will be employed during Project construction and operation are illustrated on the civil design drawings provided in Appendix 8A and the AoT permit application contained in Appendix 4.

Spill Prevention, Control, and Countermeasures Plan

To manage hazardous substances in accordance with federal regulations, Chinook Solar will prepare a Spill Prevention, Control, and Countermeasures Plan (SPCC Plan) prior to commencing construction. The SPCC Plan will describe the procedures, methods, and equipment that will be used to comply with the USEPA's oil spill prevention, control, and countermeasures standards during construction. Likewise, the SPCC Plan will comply with federal inspection, reporting, training, and record keeping requirements. An example of the anticipated SPCC Plan for the Project is provided in Appendix 15B.

Blasting Best Management Practices

The NHDES developed BMPs entitled *Rock Blasting and Water Quality Measures That Can Be Taken To Protect Water Quality and Mitigate Impacts* (NHDES, 2010). These BMPs state that "[a]ll activities related to blasting shall follow Best Management Practices (BMPs) to prevent contamination of groundwater including preparing, reviewing and following an approved blasting plan; proper drilling, explosive handing and loading procedures; observing the entire blasting procedures; evaluating blasting performance; and handling and storage of blasted rock." It is anticipated that blasting will be required for Project construction. As such, these BMPs will be incorporated into the Blasting Plan developed by the blasting contractor. Any blasting will be conducted in accordance with all state requirements

Stormwater Management

The Project will result in a small amount of new impervious area, this, combined with the proposed stormwater system will help ensure that there will not be an increase in the rate of stormwater runoff from the site. Project components contributing to new impervious area include equipment pads, pilings for racking to install the solar panels, fence posts, the Substation, and access roads. These components comprise approximately 333,000 square feet. According to a stormwater runoff analysis performed by Tighe & Bond and contained within the AoT application (included in Appendix 4), construction of the Project will not result in an increase in peak rates of runoff from the site.

The stormwater management system has been designed to minimize impacts to the existing natural drainage ways, and overall drainage patterns and directions of flow will remain generally the same. Swales and culverts have been designed to manage and direct stormwater. Culverts have been designed to convey the 25-year storm event.

The Project has been designed to avoid direct wetland and stream impacts. There will be no impacts to wetlands. Two streams will be crossed by Project access roads using open bottom crossings. Both crossings have been designed in compliance with the NHDES stream crossing guidelines.

As stated above, the Project has been designed in accordance with the New Hampshire Stormwater Manual and the NHDES Solar Guidance (January 2019). BMPs for the Project will address the applicable water quality treatment standards for this Project and are intended to improve stormwater quality from the Project site. BMPs will consist of stormwater pretreatment

practices including vegetated buffers of various widths with a minimum distance of 75 feet to resource areas, and level spreaders to reduce the potential for concentrated flows in defined areas of the Project. Stormwater treatment practices also include detention basins that have been sized for use as sedimentation basins during construction and will remain as permanent detention basins to ensure that post-construction stormwater flows do not exceed pre-development runoff rates. A copy of the complete Stormwater Management Plan is contained in the AoT application provided in Appendix 4.

J.3.c. Natural environment

For the purpose of this discussion, information pertinent to the natural environment will be described in the following categories: wildlife; natural communities; and wetlands, waterbodies, and vernal pools. Each of these categories, including potential impacts and mitigation measures, is discussed below.

Chinook Solar initiated consultations with state and federal agencies with permitting or regulatory authority over fish, wildlife, and other natural resources in 2017 and consultations continued through the spring of 2019 (see Table J-1). Additionally, consultations with the SEC began in the fall of 2017. Consultations with several non-agency stakeholders with interest in fish, wildlife, and other natural resources have also occurred, including NH Audubon, The Nature Conservancy, and The Society for the Protection of New Hampshire Forests.

Table J-1. Agency Consultation Summary for Fish, Wildlife, and Other Natural Resources

Agency	Date
NHNHB Datacheck Letter	October 24, 2017
USFWS Official Species List	November 1, 2017
NHF&G	November 15, 2017
NHDES	November 15, 2017
NHF&G	May 3, 2018
USACE	January 8, 2019
SEC (including NHF&G and NHDES)	February 28, 2019
NHNHB Datacheck Letter	March 5, 2019
NHF&G	March 21, 2019
NHDES	March 21, 2019
NHDES	June 10, 2019
NHF&G	September 4, 2019

Wildlife

As described above, Chinook Solar consulted with the NHF&G, NHNHB, and USFWS to identify any documented significant wildlife species in the vicinity of the Project. Based on consultation with the NHNHB in October of 2017 and in March of 2019, three records of wood turtles (*Glyptemys insculpta*) and one record of Blanding's turtle (*Emydoidea blandingii*) have been documented in the Project vicinity. Wood turtles are considered a Special Concern species in New Hampshire, and Blanding's turtles are listed as state endangered. Two of the wood turtle records identified by the NHNHB are located [redacted]. These documented wood turtle records are associated with [redacted]. The documented Blanding's turtle and the other wood turtle record are located [redacted]

[redacted]

The NHNHB response letters are provided in Appendix 15C.

Upon identifying nearby NHNHB records for these turtle species, Chinook Solar consulted with the NHF&G on numerous occasions to discuss BMPs and conservation strategies to implement during construction to protect turtles. A summary of recommendations discussed with the NHF&G is included in Appendix 15F. To help minimize the potential of turtles entering the Project area during construction, a perimeter silt fence will be installed around the entirety of the construction area following turtle hibernation and prior to spring emergence. The perimeter silt fence will serve as a turtle exclusion barrier. Small ramps will be installed intermittently along the interior of the perimeter silt fence so if a turtle enters the construction area, it will be able to exit the exclusion area using a ramp. An environmental monitor (qualified biologist) will also inspect the perimeter of the construction area prior to the start of construction each day to search for any turtles that may have entered the exclusion area and to inspect the conditions of the perimeter silt fence. If a turtle is found within the exclusion area, it will be relocated outside of the construction area. Additionally, environmental training will be provided to all individuals working at the Project during construction and operations. Training will include information regarding BMPs to implement if a turtle is encountered in the Project area.

During consultations with the NHF&G, vegetation maintenance was also discussed. As described elsewhere in this Application, Chinook Solar will use a seed mix to revegetate the Project following construction. The seed mix will consist of low-growing plant species to minimize the need for mowing and vegetation maintenance. If mowing is required to control the height of vegetation growing under and around the solar panels, the blade height of mowers will be set to a minimum of 6 inches to avoid harming turtles and snakes. A summary of vegetation maintenance recommendations discussed with NHF&G is provided in Appendix 15F.

Chinook Solar requested a list of federally listed threatened and endangered species that may occur in the Project area and/or may be affected by the Project. The USFWS generated an Official Species List for the Project, which did not identify any critical habitats within the Project area. The USFWS Official Species List determined that one species protected under the Endangered Species Act, the federally threatened northern long-eared bat (*Myotis septentrionalis*), had the potential to occur in the vicinity of the Project. The USFWS Official Species List is contained in Appendix 15D.

A summer presence/absence survey was conducted in 2016 by Tetra Tech to determine the presence of northern long-eared bats within the Project land control area. The presence/absence survey was performed in accordance with the USFWS *Range-wide Indiana Bat Summer Survey Guidelines* (USFWS Guidelines). The northern long-eared bat presence/absence survey report is provided in Appendix 15E.

Wildlife Acoustics Song Meter-3 BAT (SM3) ultrasonic bat detectors were deployed at eight locations and collected data over two nights in mid-July 2016. For both nights, detectors were programmed to begin monitoring one hour before sunset and to end monitoring at one hour after sunrise in full-spectrum mode. Each detector was equipped with a microphone that was mounted at a height of 2.5 to 4 meters. Acoustic data were processed using Kaleidoscope Pro v 3.1.7, and data were analyzed according to the USFWS Guidelines. The detectors recorded 861 bat passes. The presence of northern long-eared bat was not detected. Based on the analysis, the following four bat species are likely present within the Project land control area: big brown bat (*Eptesicus fuscus*), eastern red bat (*Lasiurus borealis*), hoary bat (*L. cinereus*), and little brown bat (*M. lucifugus*). Little brown bat is a state endangered species in New Hampshire; however, little brown

bats were not detected in high numbers during the survey, representing only 3% of all bat passes recorded.

Potential impacts to bats as a result of the Project are limited to indirect impacts associated with habitat loss. However, habitat loss from timber harvesting that removes summer roosting habitat is listed as a low-ranking threat to northern long-eared bat and little brown bat (NHFG, 2015), as white-nose syndrome has been identified as the primary driver of Myotis population declines (USFWS, 2015).

The northern long-eared bat presence/absence survey report was provided to the NHF&G. Based on recommendations from the NHF&G, tree removal for Project construction will occur in the winter, between November 1 and March 31, to avoid potential impacts to roosting bats during the summer maternity seasons. Additionally, the Project is designed to maintain forested corridors connecting suitable bat foraging habitat. A copy of the correspondence received from the NHF&G regarding the presence/absence survey report is included in Appendix 15F.

Natural Communities

Based on consultation with the NHNHB in October of 2017 and in March of 2019, no records of exemplary natural communities or rare plant species occur within the vicinity of the Project. The most recent NHNHB response letters are provided in Appendix 15C.

The Project land control area is comprised of undeveloped forest lands that have been subject to timber harvesting over the past several decades. During consultations with the NHF&G in November of 2017, the NHF&G requested an estimate of tree clearing needed for the Project, along with an estimate of the site that has been cleared by the current landowners. Based on this feedback, TRC conducted a forest composition survey to estimate the forest covertypes and vegetative composition within the proposed Project footprint. During the survey, six primary forested covertypes were identified. Results of the forest composition survey indicated that most forest clearing required for the Project would occur in an area that had been selectively cut within the past five years and was approximately 60% forested.

Subsequent to the 2017 forest composition survey, some of the current landowners have performed ongoing timber harvesting within the Project footprint, resulting in significant changes to the forested cover. To accurately document existing conditions at the Project, a drone flight was conducted in May 2019 capturing photographs and video footage of the landscape. The photographs and video footage demonstrate extensive harvesting has occurred since the 2017 field survey, and much of the Project footprint area has been harvested. Photographs captured during the drone flight and a figure depicting the corresponding photo locations are provided in Appendix 1, and the complete summary of the forest composition survey is contained in Appendix 15G.

The forest composition survey results were provided to the NHF&G and the NHNHB. The NHNHB concluded that within the surveyed area, hemlock-beech-oak-pine forest in various stages of succession was the primary forest type, which is common in New Hampshire. The NHNHB also concluded that area reviewed for the forest composition survey is unlikely to support any rare plant species. A copy of this correspondence with the NHNHB is included in Appendix 15C.

Wetlands, Waterbodies, and Vernal Pools

Wetland and waterbody surveys were conducted for the Project between the summer of 2016 through the summer of 2019. This effort identified wetlands and waterbodies within the Project

land control area. As result of these surveys, 23 wetlands, six streams, and eight non-jurisdictional drainages, were identified within the Project land control area. These resources are illustrated on Figure J-1 and summarized in Table J-2 below. More detailed information is provided in the Wetland, Waterbody, and Vernal Pool Survey Report contained in Appendix 15H.

Wetlands occur throughout the Project land control area, with the larger wetland complexes located in the westernmost portions of the area (see Figure J-1 below). Wetlands within the Project land control area are predominantly forested, though there are some scrub-shrub and emergent wetlands that have primarily been formed due to timber harvesting activities or exist within the transmission line right-of-way (ROW) corridor.

Streams within the Project land control area include ephemeral and intermittent streams, as well as one perennial stream. Streams within the Project land control area generally flow to the west or south. Several non-jurisdictional drainages also exist within the Project land control area, most of which are associated with gravel roads used for timber harvesting.

Vernal pool surveys were conducted for the Project in April and May of 2016. This field effort consisted of systematic visual meander surveys throughout the Project land control area. Additional surveys for vernal pools were also completed in May of 2017 and April of 2018. Vernal pool features identified were classified into three categories of origin, as described below.

1) Natural vernal pools: natural vernal pools meet the criteria provided in state rules (Chapter Env-Wt 101.108);
2) Natural-modified vernal pools: pools occurring within natural wetlands that have been modified in some way but still function as breeding pools; and
3) Unnatural vernal pools: depressions or impoundments created by anthropogenic activities and used by vernal pool breeding amphibians (e.g. vehicle or equipment ruts).

Vernal pool surveys identified 49 vernal pools within the Project land control area: 29 pools were determined to have unnatural origins; 15 pools were determined to be natural-modified pools; and 5 pools were determined to be naturally occurring. No rare or state-listed threatened or endangered species known to use vernal pools for at least one critical life stage were documented in any of the identified vernal pool features. Two unnatural vernal pool features occur within the Project footprint; however, there will be no direct impacts to natural vernal pools or natural-modified pools as a result of Project construction or operation. Each vernal pool feature within the Project land control area is depicted on Figure J.1, and a summary of each feature is provided in Table J-2 below. Detailed information regarding vernal pool surveys and results is contained in the Wetland, Waterbody, and Vernal Pool Survey Report included in Appendix 15H.

The Project has been designed to avoid direct wetland and stream impacts. There will be no impacts to wetlands. Two streams will be crossed by Project access roads using open bottom concrete box culverts. Both crossings have been designed in compliance with the NHDES stream crossing guidelines. During construction, BMPs for working near wetlands and waterbodies will be applied. During construction and operation, appropriate stormwater runoff and erosion control measures will also be implemented. Stormwater runoff prevention, erosion control practices, and BMPs are described in detail in the AoT permit application contained in Appendix 4. Additionally, a copy of the Wetland, Waterbody, and Vernal Pool Survey Report was provided to the NHDES and the NHF&G in 2019.

Figure J.1. Wetlands, Waterbodies, and Vernal Pool Features - refer to binder containing 11 x 17 documents

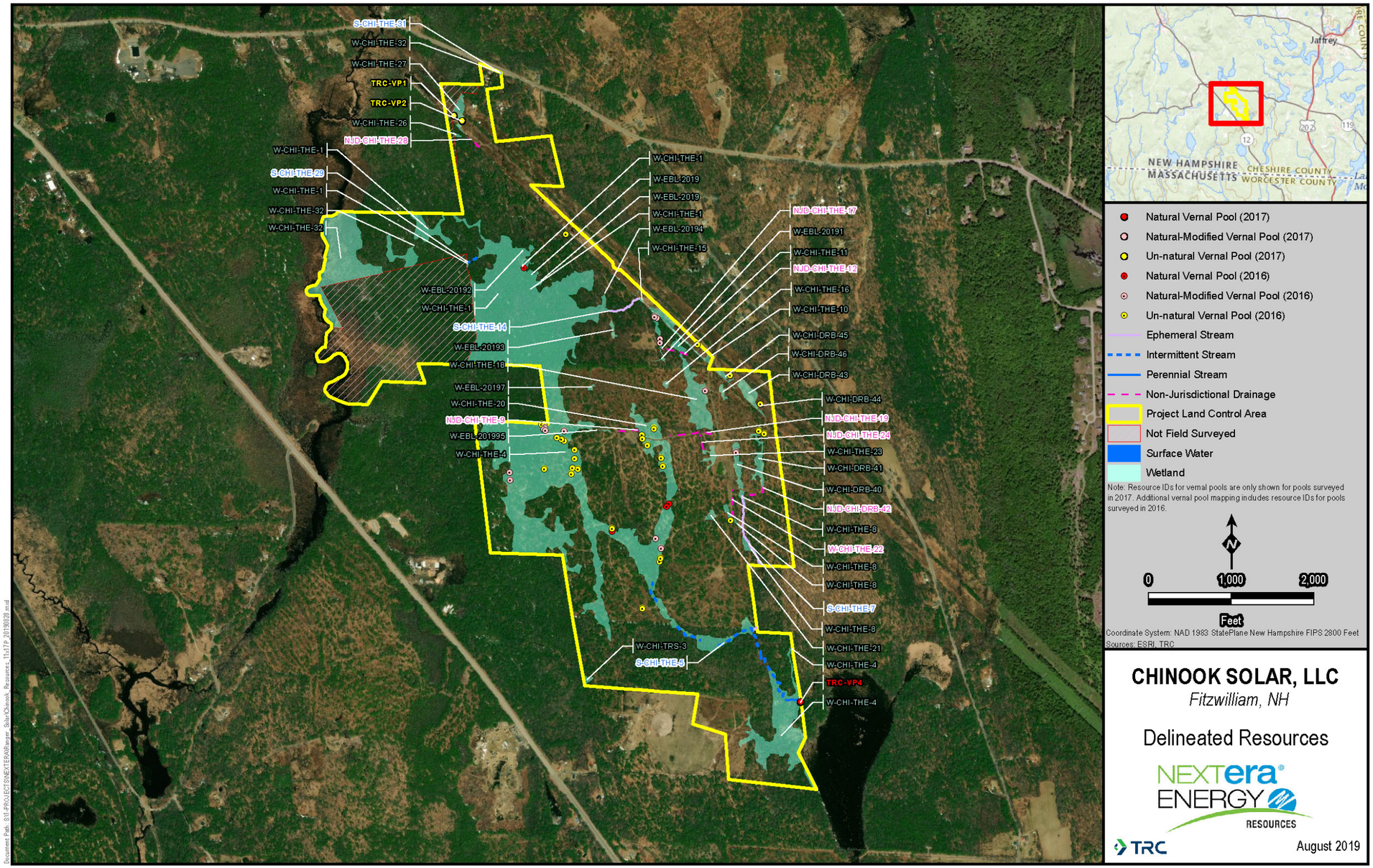

Figure J.1. Wetlands, Waterbodies, and Vernal Pool Features

Table J-2. Summary of Wetlands, Waterbodies, and Vernal Pools within the Project Land Control Area			
Resource ID	**Classification [a/]**	**Description**	**Associated Resource**
Wetlands			
W-CHI-THE-1	PFO	Large wetland directly connected to W-CHI-THE-4	Wetland: W-CHI-THE-4 Stream: S-CHI-THE-29 Vernal pool: RS-CN-VP-18-2
W-CHI-THE-4	PFO	Large wetland directly connected to W-CHI-THE-1	Wetland: W-CHI-THE-1 Streams: S-CHI-THE-5; S-CHI-THE-6 Vernal pools [b/]
W-CHI-THE-8	PFO	Series of wetlands with some areas separated by logging roads	Stream: S-CHI-THE-7 Vernal pool: RS-CN-VP36-1 Drainage: NJD-CHI-THE-22
W-CHI-THE-10	PFO	Large isolated wetland partially within the transmission line ROW	Vernal pools: RS-CN-VP22-2; RS-CN-VP65-1; RS-CN-VP21-2; RS-CN-VP20-2 Drainages: NJD-CHI-THE-12; NJD-CHI-THE-17
W-CHI-THE-11	PFO	Isolated wetland	None
W-CHI-THE-13	PEM	Connected via stream S-CHI-THE-14 to wetland W-CHI-THE-15	Stream: S-CHI-THE-14
W-CHI-THE-15	PEM	Wetland located in transmission line ROW and connected via stream S-CHI-THE-14 to wetland W-CHI-THE-15	Stream: S-CHI-THE-14
W-CHI-THE-16	PSS	Small isolated wetland	None
W-CHI-THE-18	PFO	Large isolated wetland	Vernal pool: RS-CN-VP62-1
W-CHI-THE-20	PFO	Wetland separated from wetland W-CHI-THE-4 by logging road	Vernal pools: RS-CN-VP58-1; RS-CN-VP59-1; RS-CN-VP60-1 Drainage: NJD-CHI-THE-9
W-CHI-THE-21	PEM	Isolated wetland	None
W-CHI-THE-23	PEM	Isolated wetland	Drainage: NJD-CHI-THE-24
W-CHI-THE-26	PFO	Small isolated wetland	None
W-CHI-THE-27	PEM	Isolated wetland in transmission line ROW	Vernal pool: TRC-VP2
W-CHI-THE-32	PSS	Wetland adjacent to Route 119	Stream: S-CHI-THE-31
W-CHI-DRB-40	PFO	Isolated wetland	Vernal pool: RS-CN-VP31-1
W-CHI-DRB-41	PFO	Isolated wetland	Vernal pool: RS-CN-VP33-1 Drainage: NJD-CHI-DRB-42
W-CHI-DRB-43	PSS	Wetland located in transmission line ROW	None
W-CHI-DRB-44	PSS	Wetland located in transmission line ROW	Vernal pool: RS-CN-VP16-2

Table J-2. Summary of Wetlands, Waterbodies, and Vernal Pools within the Project Land Control Area			
Resource ID	**Classification [a/]**	**Description**	**Associated Resource**
W-CHI-DRB-45	PSS	Wetland located in transmission line ROW	Vernal pool: RS-CN-VP17-2
W-CHI-DRB-46	PSS	Isolated wetland	None
W-CHI-TRS-3	PEM	Isolated wetland	None
W-EBL-20197	PSS	Isolated wetland	None
Streams			
S-CHI-THE-6	Ephemeral	Bank width 3-10', dominant substrate of cobble-gravel	Wetland: W-CHI-THE-4
S-CHI-THE-5	Intermittent	Bank width 3-10', dominant substrate of boulders/slabs	Wetland: W-CHI-THE-4
S-CHI-THE-7	Ephemeral	Bank width 0-3', dominant substrate of cobble-gravel	Wetland: W-CHI-THE-8
S-CHI-THE-14	Ephemeral	Bank width 0-3', dominant substrate of cobble-gravel	Wetland: W-CHI-THE-13; W-CHI-THE-15
S-CHI-THE-29	Intermittent	Bank width 6-12', dominant substrate of boulders/slabs	Wetland: W-CHI-THE-1
S-CHI-THE-31	Perennial	Bank width12-24', dominant substrate of cobble-gravel	Wetland: W-CHI-THE-32
Non-Jurisdictional Drainages			
NJD-CHI-THE-9	N/A	Surficial drainage and ditch in gravel logging road	Wetland: W-CHI-THE-20
NJD-CHI-THE-12	N/A	Ditch along logging road	Wetland: W-CHI-THE-10
NJD-CHI-THE-17	N/A	Ditch in forested area	Wetland: W-CHI-THE-10
NJD-CHI-THE-19	N/A	Ditch along field road	None
NJD-CHI-THE-22	N/A	Surface drainage in gravel road	Wetland: W-CHI-THE-8
NJD-CHI-THE-24	N/A	Drainage from culvert	Wetland: W-CHI-THE-23
NJD-CHI-THE-28	N/A	Constructed ditch on edge of cleared ROW	None
NJD-CHI-DRB-42	N/A	Wetland overflow draining to ditch along gravel logging road	Wetland: W-CHI-DRB-41
Vernal Pools			
RS-CN-VP18-2	Natural	Semi-permanent pool	Wetland: W-CHI-THE-1
RS-CN-VP19-2	Unnatural	Seasonal pool in vehicle rut	None
RS-CN-VP21-2	Natural-Modified	Seasonal pool containing vehicle ruts	Wetland: W-CHI-THE-10
RS-CN-VP20-2	Natural-Modified	Seasonal pool containing vehicle ruts	Wetland: W-CHI-THE-10
RS-CN-VP22-2	Natural-Modified	Seasonal pool containing vehicle ruts	Wetland: W-CHI-THE-10
RS-CN-VP65-1	Natural-Modified	Seasonal pool containing vehicle ruts	Wetland: W-CHI-THE-10

Table J-2. Summary of Wetlands, Waterbodies, and Vernal Pools within the Project Land Control Area			
Resource ID	**Classification [a/]**	**Description**	**Associated Resource**
RS-CN-VP17-2	Unnatural	Seasonal pool in transmission line ROW	Wetland: W-CHI-DRB-45
RS-CN-VP62-1	Natural-Modified	Seasonal pool	Wetland: W-CHI-THE-18
RS-CN-VP66-1	Unnatural	Seasonal pool in transmission line ROW	None
RS-CN-VP16-2	Unnatural	Seasonal pool located in transmission line ROW	Wetland: W-CHI-DRB-44
RS-CN-VP32-1	Unnatural	Upland isolated, seasonal pool in vehicle rut	None
RS-CN-VP33-1	Unnatural	Seasonal pool in vehicle rut	Wetland: W-CHI-DRB-41
RS-CN-VP43-1	Unnatural	Seasonal pool containing vehicle ruts	Wetland: W-CHI-THE-4
RS-CN-VP44-1	Unnatural	Seasonal pool	Wetland: W-CHI-THE-4
RS-CN-VP45-1	Natural-Modified	Seasonal pool containing vehicle ruts	Wetland: W-CHI-THE-4
RS-CN-VP46-1	Natural-Modified	Seasonal pool in vehicle rut	Wetland: W-CHI-THE-4
RS-CN-VP47-1	Natural-Modified	Seasonal pool in vehicle rut	Wetland: W-CHI-THE-4
RS-CN-VP48-1	Natural-Modified	Seasonal pool in vehicle rut	Wetland: W-CHI-THE-4
RS-CN-VP49-1	Unnatural	Seasonal pool in vehicle rut	Wetland: W-CHI-THE-4
RS-CN-VP50-1	Unnatural	Seasonal pool in vehicle rut	Wetland: W-CHI-THE-4
RS-CN-VP51-1	Unnatural	Seasonal pool in vehicle rut	Wetland: W-CHI-THE-4
RS-CN-VP52-1	Unnatural	Seasonal pool in vehicle rut	Wetland: W-CHI-THE-4
RS-CN-VP53-1	Unnatural	Seasonal pool in vehicle rut	Wetland: W-CHI-THE-4
RS-CN-VP54-1	Unnatural	Seasonal pool in vehicle rut	Wetland: W-CHI-THE-4
RS-CN-VP55-1	Unnatural	Seasonal pool in vehicle rut	Wetland: W-CHI-THE-4
RS-CN-VP56-1	Unnatural	Seasonal pool in vehicle rut	Wetland: W-CHI-THE-4
RS-CN-VP10-2	Unnatural	Seasonal pool containing vehicle ruts	Wetland: W-CHI-THE-4
RS-CN-VP40-1	Natural-Modified	Seasonal pool containing vehicle ruts	Wetland: W-CHI-THE-4
RS-CN-VP41-1	Natural-Modified	Seasonal pool containing vehicle ruts	Wetland: W-CHI-THE-4
RS-CN-VP58-1	Unnatural	Seasonal pool in vehicle rut	Wetland: W-CHI-THE-20
RS-CN-VP59-1	Unnatural	Seasonal pool in vehicle rut	Wetland: W-CHI-THE-20
RS-CN-VP60-1	Unnatural	Seasonal pool in vehicle rut	Wetland: W-CHI-THE-20
RS-CN-VP11-2	Unnatural	Seasonal pool in vehicle rut	Wetland: W-CHI-THE-4
RS-CN-VP57-1	Unnatural	Seasonal pool in vehicle rut	Wetland: W-CHI-THE-4
RS-CN-VP61-1	Unnatural	Seasonal pool in excavated area	Wetland: W-CHI-THE-4
RS-CN-VP12-2	Unnatural	Seasonal pool in vehicle rut	Wetland: W-CHI-THE-4
RS-CN-VP38-1	Natural	Permanent pool	Wetland: W-CHI-THE-4
RS-CN-VP39-1	Natural	Seasonal pool	Wetland: W-CHI-THE-4

Table J-2. Summary of Wetlands, Waterbodies, and Vernal Pools within the Project Land Control Area

Resource ID	Classification [a/]	Description	Associated Resource
RS-CN-VP24-1	Natural-Modified	Seasonal pool in vehicle rut	Wetland: W-CHI-THE-4
RS-CN-VP31-1	Natural-Modified	Seasonal pool in vehicle rut	Wetland: W-CHI-DRB-40
RS-CN-VP36-1	Unnatural	Seasonal pool in roadside ditch	Wetland: W-CHI-THE-8
RS-CN-VP22-1	Natural	Seasonal pool	Wetland: W-CHI-THE-4
RS-CN-VP23-1	Unnatural	Seasonal pool containing vehicle ruts	Wetland: W-CHI-THE-4
RS-CN-VP25-1	Natural-Modified	Seasonal pool in vehicle rut	Wetland: W-CHI-THE-4
RS-CN-VP21-1	Unnatural	Seasonal pool in vehicle rut	None
RS-CN-VP30-1	Unnatural	Seasonal pool in vehicle rut	Wetland: W-CHI-THE-4
TRC-VP1	Natural-Modified	Upland isolated, seasonal pool	None
TRC-VP2	Unnatural	Seasonal pool located in transmission line ROW	Wetland: W-CHI-THE-27
TRC-VP4	Natural	Seasonal pool	Wetland: W-CHI-THE-4

[a/] PFO = palustrine forested wetland; PSS = palustrine scrub-shrub wetland; PEM = palustrine emergent wetland.
[b/] Vernal pools contained within wetland W-CHI-THE-4: RS-CN-VP43-1; RS-CN-VP44-1; RS-CN-VP45-1; RS-CN-VP46-1; RS-CN-VP47-1; RS-CN-VP48-1; RS-CN-VP49-1; RS-CN-VP50-1; RS-CN-VP51-1; RS-CN-VP52-1; RS-CN-VP53-1; RS-CN-VP54-1; RS-CN-VP55-1; RS-CN-VP56-1; RS-CN-VP10-2; RS-CN-VP40-1; RS-CN-VP41-1; RS-CN-VP11-2; RS-CN-VP57-1; RS-CN-VP61-1; RS-CN-VP12-2; RS-CN-VP38-1; RS-CN-VP39-1; RS-CN-VP24-1; RS-CN-VP22-1; RS-CN-VP23-1; RS-CN-VP25-1; RS-CN-VP30-1; TRC-VP4.

J.4. Public Health and Safety

NEER is an environmentally responsible developer and owner of renewable energy projects that places signigicant importance on preventing negative environmental, health, or safety impacts to the communities where it constructs and operates its facilities. NEER's goal is to proactively manage concerns during development, siting, permitting, construction, and operation. NEER holds itself and its employees to a very high safety standard, and all construction general contractors are required to meet stringent safety qualifications.

Chinook Solar is committed to maintaining a safe working environment, including using suppliers with a demonstrated commitment to safety. In general, suppliers who have a presence on company premises of 30 or more cumulative person-days within 12 months are required to comply with the requirements of NextEra's Supplier Safe and Secure Workplace policy whereby suppliers are expected to demonstrate an Experience Modification Rate (EMR) for safety purposes that is equal to or better than average for their industry. An EMR is a ratio that indicates how a company's Workers' Compensation losses compare to those of other companies with similar classifications. NextEra maintains specific guidelines for the implementation of these goals and invokes them as requirements within contractual agreements with suppliers.

Chinook Solar will construct and operate the Project consistent with NextEra's corporate commitment to meeting all applicable state and federal requirements, including Occupational Safety and Health Administration (OSHA) safety regulations. Additionally, the National Electrical Code (NEC) provides comprehensive electrical safety design, installation, and inspection requirements for electrical conductors and equipment related to a solar facility. Two NEC articles are devoted to addressing solar energy systems: Article 690 (Solar Photovoltaic Systems) and Article 705 (Interconnected Electrical Power Production Sources). As stated in NEC Article 690, the installation of equipment and all associated wiring and interconnections shall be performed only by qualified persons. Chinook Solar will comply with these requirements.

Signage and labeling requirements are also important safety elements of solar facilities because they alert the public, firefighters or other emergency responders to electrocution hazards from solar facility equipment. Identification, signage, and labeling requirements are specified in detail in the NESC. Chinook Solar will ensure that the Project is properly signed and labeled in accordance with the NESC requirements.

During construction and before the Project is fully operational, all electrical equipment will be inspected under rigorous testing and commissioning procedures. In addition, prior to activating the electrical lines, the interconnecting utility will also perform and require inspections, testing, and commissioning documentation for grid and system safety. This process is also coordinated through regular conference calls with ISO-NE and local utilities.

Chinook Solar is committed to constructing and operating the Project with great concern for public health and safety. Chinook Solar will work with the Fitzwilliam Fire Department to notify them of construction plans and provide site visits to review access to Project facilities and emergency response procedures. Furthermore, Chinook Solar will continue to engage with Fitzwilliam with the goal of entering into an agreement that will address issues related to public health and safety. Various aspects of public health and safety related to the Project are described below.

J.4.a. Sound

The Project will not produce sound that will unreasonably adversely affect nearby residents or the general public. Tech Environmental conducted a comprehensive sound level assessment for the Project including baseline sound monitoring and acoustic modeling. Under the Fitzwilliam Zoning Code, Commercial and Industrial Noise-Chapter 130 (Noise Ordinance), Fitzwilliam has established a maximum allowable incremental sound increase of 10 decibel A-weighted (dBA) above ambient. The Fitzwilliam sound limits are applicable to the L_{10} sound metric. For the rural residential district, which is where the Project is located, the applicable background one-hour L_{90} sound level is 30 dBA during the daytime (7 AM to 10 PM) and 24 dBA during the nighttime (10 PM to 7 AM). Therefore, the maximum allowable one-hour L_{10} sound limit in this district is 40 dBA during the daytime and 34 dBA during the nighttime. Sound limits in the SEC rules (Site 301.08(d)(1)) are also based on a 10 dBA increase above ambient L_{90} baseline levels. The Fitzwilliam Noise Ordinance is included in Appendix 16A.

Baseline sound levels were measured to characterize the existing background sound levels in the area. The lowest daytime L_{90} sound level recorded was 23 dBA, and the lowest nighttime L_{90} sound level recorded was 20 dBA. To assess compliance with both the Fitzwilliam and SEC sound limits, the lowest measured ambient sound levels were used in the acoustic modeling analysis. Results of the analysis indicated that the predicted sound level increases would range from 0 to 5 dBA above the existing baseline ambient L_{90} daytime sound levels and from 0 to 6 dBA above the

existing baseline ambient L_{90} for nighttime sound levels. Additionally, no tonal sounds[2] were predicted at the 51 residential receptors included in the analysis. The Project will comply with Fitzwilliam's Noise Ordinance and the SEC incremental sound limits. The complete acoustic study report is contained in Appendix 16B.

J.4.b. Decommissioning plan

Chinook Solar has provided a decommissioning plan in Appendix 16C. This decommissioning plan and cost estimate are consistent with the application requirements for a Certificate found in NH Administrative Rules Site 301.08(d)(2).

As noted, Chinook Solar will be requesting a waiver from the requirement that underground infrastructure at depths less than four feet below grade be removed from the site; requesting instead that the removal requirement apply to all infrastructure to a depth of three feet. Chinook Solar will also be requesting a waiver for solar racking piles that will have been concreted into rock. As described below and in greater detail in Appendix 16C, Chinook Solar has addressed all necessary decommissioning activities and will provide decommissioning funding assurance prior to commencement of construction that is consistent with conditions contained in a Certificate.

The estimated likely life of the Project is 30 years; however, it is possible that the Project will operate beyond that time. At the end of the useful life of the Project the site will be decommissioned.

Decommissioning will consist of the following activities:

1. Provide a decommissioning schedule to Fitzwilliam and the SEC prior to initiating any decommissioning activities.
2. Acquire approvals for transport of oversized/overweight loads from the Project site, if needed. Coordinate with the New Hampshire Department of Transportation prior to transport to confirm routes.
3. Disconnect the solar facility from the utility power grid.
4. Disconnect all aboveground wirings, lines, and electrical interconnections and recycle offsite by an approved recycling facility.
5. Disconnect and remove all underground lines and collection lines to a depth of three feet below grade and recycle off-site by an approved recycling facility. [Chinook will be requesting a partial waiver from the requirement that underground infrastructure at depths less than four feet below grade be removed from the site.]
6. Remove the perimeter fence and recycle off-site by an approved metal recycler.
7. Remove all solar panels (PV modules) and ship to recycling facilities for recycling and material reuse.
8. Remove steel rack foundations, solar racking piles or portions thereof (depending on whether a waiver is granted), fixed tilt racking,
9. Remove all site inverters, transformers, meters, fans, and other electrical components and recycle off-site by an approved recycler.
10. Remove concrete foundations and concrete equipment pads and recycle off-site by a concrete recycler.

[2] Tonal sound is commonly referred to as discrete frequency sound and is characterized by spectral tones that are pure tone in nature. Pure tones are usually centered at certain frequencies called octave bands. Examples of tonal sounds include a tuning fork, a church bell, a train whistle, and squealing brakes.

11. Remove all Substation equipment, including the transformer and all security fencing and concrete foundations.
12. Determine if access roads will remain in place for their continued use. If access roads are deemed unnecessary, remove access road surface materials and restore locations of access roads to original conditions to the extent possible.
13. Restore and stabilize the site after all equipment is removed. Minor site grading may be required. Site restoration activities will be undertaken with the input of the Town of Fitzwilliam.

All Project materials will be recycled to the maximum extent possible and will be disposed of at an approved recycling facility.

J.4.c. Fire

As described above, prior to commissioning of the Project, all electrical equipment will be inspected under rigorous commissioning procedures, as well as by the utilities for grid connection and protection system safety. During operations, qualified personnel will routinely inspect equipment in accordance with preventative maintenance schedules.

There will be very few flammable components associated with the Project; however, the presence of electrical equipment does present a potential fire risk. In the event of a fire, the ROCC will detect equipment faults which will then lead to dispatch of site-personnel to investigate accordingly.

Chinook Solar is committed to providing appropriate training to local emergency responders. Chinook Solar has consulted with the State Fire Marshal's Office to discuss fire safety issues associated with the Project and has incorporated the Fire Marshal's suggestions into its Emergency Response and Fire Safety Plan. Chinook Solar will continue to work cooperatively with the State Fire Marshal's Office to address any concerns that may arise. Fire safety and response is addressed in the Emergency Response and Fire Safety Plan for the Project, provided in Appendix 16D.

J.4.d. Emergency response

As stated above, Chinook Solar is committed to providing the necessary training to local emergency responders to ensure the safety of emergency service providers servicing the Project and surrounding community. The Project has been designed to facilitate movement throughout the site in the event of an emergency. All gravel access roads have been designed to facilitate access throughout the Project. Roads will be 12 feet wide and will have turnarounds with 50-foot radii to accommodate large truck movement (e.g. pumper or ladder type fire trucks). There will be approximately 8.5 feet of spacing between each row of panels that will also facilitate access, if needed. In addition, there will be a minimum 10-foot wide clear path between the fence and panels to allow for additional vehicle access (e.g. pickup truck, ATV, etc.) throughout the site.

Solar panels, located throughout the Project, convert sunlight to electricity. The process involves solid-state technology that consumes no materials and is completely self-contained. As such, the primary concern for first responders is exposure to electrical components that present a hazard to electric shock. In the event of an emergency response, the following assumptions should be made:

- All solar equipment on the Project contains lethal AC and DC voltages;
- All inverters contain energy storage devices that require 15 minutes to safely discharge lethal voltages;

- Electricity is supplied from multiple sources;
- The Project should only be accessed by personnel or emergency responders under the direction of Chinook Solar.

Additional details pertaining to emergency response are provided in the Project's Emergency Response and Fire Safety Plan contained in Appendix 16D.

J.4.e. Additional measures to avoid, minimize, or mitigate public health and safety impacts

Construction and operation of the Project will have minimal impacts on public health and safety. The Project has been designed such that its setbacks from residences, roads, and utilities will protect the public's health and safety by allowing adequate space for safe construction and operation of the Project. The equipment proposed for the Project are held to industry standards of quality. The design and installation of the equipment, as well as the overall Project configuration, protects against potential danger to the public from noise, fire, and stray voltage. The Project will also be monitored by NextEra corporate security and remotely by the Renewable Operations Control Center (ROCC) to ensure there are no public safety issues such as tampering with equipment or forms of vandalism. In the event of an emergency requiring shutdown, power blocks within the solar arrays can be shut off at each inverter either in the field or remotely.

As previously described, the entire Project is located on private land. To protect public safety, there will be no public access to the Project during construction or operations. Access to the Project will be limited to trained staff and maintenance personnel only. Solar panel arrays and the Substation will be surrounded by a 7-foot-tall chain link fence per requirements of the NESC. Additionally, fencing around the Substation will include an additional foot of barbed wire along the top of the fence.

Access to the Project site will be located off Fullam Hill Road, with gates in the chain-link fence that will be secured with a padlock. Following initial entrance into the Project area via the access road, each area of the Project will be enclosed by chain-link fencing with locking gates to ensure public safety. Upon consultation with local responders, gates will be outfitted with a "Knox Box" or daisy chain type locking system to allow site access by emergency personnel. NEER has 24/7/365 remote monitoring and operating capabilities from their ROCC in Juno Beach, Florida. Should issues arise, the ROCC will dispatch local operations personnel, as necessary.

K. EFFECTS ON ORDERLY DEVELOPMENT OF THE REGION

The Project will not unduly interfere with the orderly development of the region. The Project as proposed is consistent with and complimentary to existing land uses, promotes economic development, expands the local tax base, and uses existing infrastructure, most notably existing electrical transmission lines. The proposed Project site is directly adjacent to an existing National Grid transmission corridor where the Project proposes to interconnect to the grid. As described elsewhere in this Application, this eliminates the need for new transmission line construction, thereby avoiding the many potential impacts associated with such development.

Many towns and regional and state planning agencies strive to reduce dependencies on residential property tax revenue by encouraging environmentally sound commercial and industrial development. The proposed Project is environmentally sound, as it will provide renewable, emission-free electricity and has been designed to avoid impacts to resources and with a minimized Project footprint. The Project will provide a new source of revenue for Fitzwilliam but will not burden Fitzwilliam with costs typically associated with other forms of development.

The Project is anticipated to supply clean, domestically produced electricity in an amount equivalent to the annual consumption of approximately 7,000 average homes, while also creating jobs, reducing the regional reliance on fossil fuels, and providing tax benefits to Fitzwilliam and the state. Chinook Solar will seek to use qualified local labor to the greatest extent possible throughout the permitting, development, and construction of the Project. This will include opportunities such as site clearing, construction, surveying, monitoring, and other related jobs. Furthermore, in anticipation of a 20-year PILOT agreement, Chinook Solar would become the largest taxpayer in Fitzwilliam. Additional details regarding economic impacts of the Project are described in Sections K.2 and K.3 below and Appendix 18.

Project Outreach

In reviewing the effects of the proposed Project on the orderly development of the region, the views of municipal and regional planning commissions and municipal governing bodies were thoroughly reviewed and considered throughout the development and design of the Project such that the Project will not interfere with the orderly development of the region. Chinook Solar has proactively engaged in several discussions about the Project with state and federal agencies, municipal governing boards, and other local and regional organizations. Table K-1 contains a list of primary meetings made by Chinook Solar to discuss the Project with agencies, municipal officials, other organizations, and the public. Appendix 17A contains copies of notes recorded during agency meetings and stakeholder outreach meetings.

Chinook Solar held an abutters event in Fitzwilliam designed to address questions or concerns of Project abutters and participating landowners. Chinook Solar also held a public open house meeting in Fitzwilliam. At both events, representatives from Chinook Solar, along with Project consultants, provided information about the Project, answered questions, and listened to concerns regarding the Project. Written information was provided and visual information in the form of poster boards was presented to attendees. In addition, Chinook Solar has also engaged in many individual discussions and provided responses to questions via phone calls and emails.

Table K-1. Project Outreach Summary	
Agency, Governing Body, or Organization	**Date**
State and Federal Agencies	
SEC	October 10, 2017
NHF&G	November 15, 2017
NHDES	November 15, 2017
NHF&G	May 3, 2018
USACE	January 8, 2019
NHDHR	January 15, 2019
SEC (including other state agencies)	February 28, 2019
NHF&G	March 21, 2019
NHDES	March 21, 2019
New Hampshire Department of Transportation	March 21, 2019
NHDES	June 10, 2019
SEC	June 12, 2019
Fitzwilliam	
Select Board	April 25, 2016
Planning Board	June 7, 2016
Select Board	March 20, 2017
Planning Board	March 20, 2018
Abutters Event	May 16, 2018
Public Open House	May 17, 2018
Planning Board, Select Board, Conservation Commission	January 15, 2019
Planning Board and Select Board	February 19, 2019
Select Board	May 2, 2019
Public Open House and Information Session	July 18, 2019
Historic District Commission	August 29, 2019
Non-Profit and Regional Organizations	
Society for the Protection of New Hampshire Forests	September 2017
New Hampshire Audubon	May 1, 2018
The Nature Conservancy	September 26, 2018
Society for the Protection of New Hampshire Forests	September 26, 2018
Southwest Region Planning Commission	December 13, 2018
Clean Energy NH and Monadnock Energy Hub	December 13, 2018
Greater Peterborough Chamber of Commerce	December 13, 2018
Greater Peterborough Chamber of Commerce	May 3, 2019
Clean Energy NH	May 16, 2019
Society for the Protection of New Hampshire Forests	June 12, 2019
Appalachian Mountain Club	June 12, 2019
Society for the Protection of New Hampshire Forests	September 12, 2019
The Nature Conservancy	September 12, 2019

Agreements with Fitzwilliam

Chinook Solar has discussed potential agreements with Fitzwilliam to address use of roads, construction timing, decommissioning, and other related issues. At meetings with Fitzwilliam's Planning Board, Select Board, and Conservation Commission, several agreement issues have been discussed, such as decommissioning, site security and access, hours and days of construction, lighting, fire safety, and other issues. A formal MOU with Fitzwilliam on these issues is

not complete at this time, but Chinook Solar is committed to working toward a finalized agreement. In the event there is a finalized MOU, Chinook Solar will seek to have it attached to the Certificate, thereby making the provisions of the agreement conditions of the Certificate.

Consistency with Master Plans of Affected Communities and Regional Planning Initiatives

The Project is consistent with the Master Plans of the affected communities, as well as local and regional energy initiatives. The Fitzwilliam Master Plan outlines an overall goal to "balance issues of energy conservation, protection of natural resources and economic development in a way that maintains rural character and sustains a viable community". One of the goals identified in the Fitzwilliam Master Plan is to support and encourage energy conservation. Several strategies are outlined under this goal, one of which is to ensure land use regulations do not unduly restrict the use of alternative energy sources or sustainable construction techniques. Solar energy systems represent a low impact non-residential type of development, requiring no additional strain on municipalities in terms of water capacity, school enrollment, or increased local vehicular traffic once the Project is operational. The Fitzwilliam Master Plan is accessible online at https://fitzwilliam-nh.gov/vertical/sites/%7B5152AF08-0D8E-4832-8682-9F3DC8413E4B%7D/uploads/Master_Plan_2012(1).pdf. Chinook Solar will provide hard copies of the Fitzwilliam Master Plan upon request.

The Jaffrey Master Plan identifies the need to attract new business enterprises to Jaffrey, promote sustainable energy practices, and place increased emphasis on energy efficiency and "green" approaches with respect to public investment. The Jaffrey Master Plan is accessible online at https://www.townofjaffrey.com/planning-economic-development/files/2018-master-plan. Chinook Solar will provide hard copies of the Jaffrey Master Plan upon request.

The Rindge Master Plan does not specifically address energy conservation or efficiency; however, the need to diversity the economic base is included in the Rindge Master Plan and the Rindge Economic Development Initiative. The Rindge Master Plan is accessible online at https://www.rindgenh.org/towncloud/resources/Planning-Board-15?f=Master-Plan&categoryID=6. Chinook Solar will supply hard copies of the Rindge Master Plan upon request.

Both the Jaffrey Energy Committee and Rindge Energy Committee are members of the Monadnock Energy Hub. The Monadnock Energy Hub pursues effective and achievable initiatives that reduce greenhouse gas emissions, accelerate the adoption of energy efficiency and renewable energy technologies, and improve energy security and resilience throughout the Monadnock Region of New Hampshire.

The Project will also support many of the Southwest Region Planning Commission's (SWRPC) stated goals. In the *Comprehensive Economic Development Strategy for Southwest New Hampshire* (2015), the SWRPC identifies "current lack of local, renewable energy alternatives" to conventional energy sources as a substantial risk to future growth in the region. Additionally, as stated by the SWRPC in *Monadnock Region Future: A Plan for Southwest New Hampshire*, the lack of local, renewable energy alternatives is a key factor contributing to energy costs concerns in the region. An excerpt from the *Comprehensive Economic Development Strategy for Southwest New Hampshire* is contained in Appendix 17C, and an excerpt from the *Monadnock Region Future: A Plan for Southwest New Hampshire* is included in Appendix 17D.

Even more applicable than the aforementioned SWRPC documents is the *Southwest New Hampshire Natural Resources Plan* (2014), prepared by the SWRPC. This plan discusses energy resources, energy efficiency, and energy diversity. As stated in this plan, "access to affordable

and reliable energy is essential to our economic stability and growth, both globally and at the community level. However, this heavy reliance, specifically on non-renewable and imported energy sources, has made our Region vulnerable to changes in its supply and price. It can also have substantial impacts on the quality and stability of the environment as a result of emissions, land use impacts, and waste from the production and use of certain energy sources." The plan emphasizes the importance for the region to encourage the development and expansion of renewable energy resources, including solar, to stabilize the price and supply of energy and to reduce the environmental impacts of fossil fuels. The Energy Resources Chapter of *the Southwest New Hampshire Natural Resources Plan* is provided in Appendix 17E. In addition to considering the plans identified above, Chinook Solar also consulted with the SWRPC in December of 2018 to provide an overview of the Project, answer questions, and gather feedback.

The four plans/documents described above provided a broad framework to consider during Project development. Along with these comprehensive planning documents, Chinook Solar put a great deal of emphasis on recognizing and complying with local ordinances to the maximum extent practicable. The following local provisions were considered during Project design: Commercial and Industrial Noise Ordinance (Chapter 130); Preservation of Rural Character (Chapter 137); Fitzwilliam's Wetlands Protection Overlay District; and Fitzwilliam's Solar Ordinance. Chinook Solar has designed the Project to ensure compatibility with these local ordinances. Copies of these four ordinances are contained in Appendices 19F through 19I.

In summary, the proposed Project will not unduly interfere with the orderly development of the region. The installation of a renewable energy facility in a sparsely settled area of Fitzwilliam on large parcels of privately-owned land is in concert with the orderly development of the region, especially considering the Project's proximity to an existing transmission line. The Project will also enhance economic development and provide a source of clean energy.

K.1. Land Use

Impacts on local land use during construction and operation of the Project are expected to be minimal. Chinook Solar has purchase options or lease agreements for approximately 513 acres of private land owned by five landowners. The Project is sited on previously harvested forest land within Fitzwilliam's rural residential land use district. The principal general uses within the rural residential district include agriculture, forestry, conservation, recreation, and livestock keeping. Various residential uses, governmental, institutional, and public service uses, and business uses are also included as principal uses within this district. Additionally, per Fitzwilliam's Solar Ordinance, utility-scale ground-mounted solar systems are a principal use within the rural residential district.

The Project footprint will occupy approximately 110 acres comprised of panel arrays, inverters, access roads, and the Substation. The lands under purchase option or lease agreement that occur beyond the Project fencing will remain in a forested condition. Construction of the Project will not impact surrounding land uses, nor create an additional burden in terms of road access, water usage, or strain on municipal services.

K.1.a. Description of prevailing land uses in the affected communities

Prevailing land uses in the affected communities of Fitzwilliam, Jaffrey, and Rindge include timber harvesting, agriculture, tourism, recreation, conservation lands, and residential uses, with some commercial and industrial businesses. Primary land uses in the vicinity of the Project include logging and agriculture, with other prevailing land uses consisting of commercial enterprises along NH Route 12, scattered residential areas, passive outdoor recreation, and undeveloped forest. The primary commercial enterprises in the immediate area include PLP Composite Technologies,

Inc., Damon Lumber Company, and ABTech, Inc., along with various smaller business such as the Fitzwilliam Inn, several automotive repair shops, and assorted retail businesses. Residential development is primarily low density, with housing ranging from seasonal camps and trailer homes to colonial homes. Recreational resources in the area include seasonal camping, hiking, hunting, fishing, boating, and snowmobiling. Remaining lands in the area consist of undeveloped forests, wetlands and waterbodies, and conservation lands.

K.1.b. Description of how the proposed facility is consistent or inconsistent with such land uses

Aside from the immediate Project development area, local land uses will be able to continue in the same manner as they have for several decades as the Project is compatible with local land uses and development patterns in the surrounding area. The Project will be located entirely on private land, with no formal public access points and no maintained public trail systems.

Timber harvesting

Timber harvesting has been occurring in and around the Project area for many decades. Unrelated to the Project, several acres within the Project area have recently been harvested. Landscape features within the Project area reflect such activities, with logging roads and different forest cover types and ages prevalent. A detailed description of forest cover types within the Project development area is provided in Appendix 15G. While lands under purchase option are not currently planned for timber harvesting during the Project's operation, a forestry management plan may be considered in the future.

Outdoor recreation

The Project will have virtually no effect on the public's ability to use the general area for outdoor recreation. The nearest formal recreational areas to the Project include the Pinnacle Hiking Trails and the Cheshire Rail Trail, both of which are located approximately 1.8 miles from the Project. Impacts to informal local recreation, such as hunting and fishing, are anticipated to be very minor. The extent to which hunting activity occurs within the Project footprint is unknown. Following construction, hunting will not be permitted within the fenced Project area; however, the Project will not impact hunting in the surrounding area. The Project will not directly impact any fisheries, such as streams, ponds, or lakes; therefore, there will be no impact on fishing opportunities as a result of the Project.

The Project will not directly impact boating opportunities. Laurel Lake and Scott Pond are the only waterbodies with public boating access in Fitzwilliam (NHFG, 2019). The public boat launch on Scott Pond is located approximately 0.9 mile from the Project, and the access points for the other two waterbodies are both more than 2 miles from the Project. The Project also does not directly impact any motorized recreational trails, as there are no motorized trails on any of the parcels under purchase option or lease agreement for the Project. Motorized trails that occur within the broader area will continue to be used as they are today.

A discussion of potential visual impacts to local recreational resources is provided in Section J.1 and Appendix 13.

K.2. Economy of the Region

Utility-scale solar development provides opportunity for economic benefits and job creation resulting from manufacturing of Project materials, sales and distribution of materials, permitting and associated surveys and studies, Project construction, and on-going operation and

maintenance activities. The economic benefits of utility-scale solar development for local communities include the creation of local jobs, increased tax revenues, and the generation of lease income for landowners.

A detailed Economic Impact Assessment for the Project is provided in Appendix 18.

K.2.a. Economic effect of the facility on the affected communities

Affected communities considered in the Economic Impact Assessment include Fitzwilliam, Jaffrey, and Rindge, all of which occur within Cheshire County. The affected communities were selected based on the vegetated viewshed map produced as part of the VIA, as described in Section J.1. The vegetated viewshed map indicated these three towns were the only communities within 6 miles of the Project with any views of the Project. The Project is not expected to have any significant negative economic impacts on the affected communities, including no widespread changes to residential property values and no declines in tourism or recreation economic activity.

Fitzwilliam is expected to experience a positive net impact due to increased tax related revenue and landowner lease payments from the Project following construction. Jaffrey and Rindge are not predicted to receive any direct increase in revenue as a result of the Project; therefore, no significant change in economic activity is expected for these towns.

To the extent that local contractors from the affected communities are employed by the Project during construction, then the $10.4 million in positive economic value expected to occur in New Hampshire would concentrate in these communities. Information regarding expected employment in specific communities during Project construction was not available when the Economic Impact Assessment was performed. Consequently, the positive economic impact anticipated within New Hampshire during Project construction was not directly attributed to any specific region, including Fitzwilliam, Jaffrey, and Rindge.

K.2.b. Economic effect of the proposed facility on in-state economic activity during construction and operation

The Project is expected to generate $18 million in increased economic activity to New Hampshire over the next 20 years, which is the equivalent of $0.6 million per MW AC. The greatest period of economic activity and benefits for the New Hampshire economy will be produced during Project construction. The total impact on the New Hampshire economy during construction is expected to be approximately 127 full-time equivalent (FTE) jobs generating $10.7 million in earnings and $10.4 million in added economic value. The total impact on the New Hampshire economy during Project operations is expected to be approximately four to six FTE jobs generating $0.2 to $0.4 million in earnings annually and $0.4 to $0.5 million in added annual economic value to New Hampshire.

K.2.c. Effect of the proposed facility on State tax revenues and tax revenues of the host and regional communities

An estimated $10.4 million in added economic value to the overall state economy is anticipated as a result of jobs supported by Project construction. During Project operations, jobs created are expected to generate an additional $0.4 to $0.5 million in economic value to the state economy annually. Tax payments to the state for the state-wide utility property tax are estimated to be $160,000 annually, and a PILOT agreement payment to Fitzwilliam is estimated to be approximately $300,000 annually.

One of the most significant local economic benefits of the Project for the host community will be the increased tax revenue. Chinook Solar has initiated discussions with Fitzwilliam regarding a PILOT agreement. The increased funding that would result from anticipated annual PILOT payments would be a positive economic factor for Fitzwilliam. The funds would provide additional financial flexibility for Fitzwilliam that could be applied in different combinations in the areas of property tax reduction and increased services for Fitzwilliam. Although a PILOT agreement with Fitzwilliam is not yet in place, the modeling performed as part of the Economic Impact Assessment assumed an annual PILOT payment of $300,000. For reference, Fitzwilliam expended $1,586,103 for town operations in 2018, excluding capital reserves, debt service, operating transfers out, and payments to other governments. An annual PILOT agreement payment of $300,000 would have covered nearly 20% of those 2018 expenditures.

K.2.d. Effect of the proposed facility on real estate values in the affected communities

As part of the Economic Impact Assessment completed for the Project, a real estate analysis was conducted to determine if there is any evidence that utility-scale solar projects have a negative impact on a region's real estate market. The real estate analysis also examined the likelihood that the Project will have a negative impact on the region's economy by disrupting the orderly development of the region's real estate markets.

There is limited research on the impacts of utility-scale solar projects on adjacent and nearby property values. The current body of research on renewable energy facilities has primarily been directed towards understanding the general relationship between wind facilities and residential real estate values. In examining the literature regarding wind projects and utility-scale solar projects, there is no indication of widespread, consistent patterns of impact on residential property values as a result of the development of utility-scale solar projects operating within regulatory compliance.

While utility-scale solar is relatively new to New England and especially New Hampshire, the New Hampshire Electric Cooperative (NHEC) solar array in Moultonborough provides the opportunity to examine the behavior of the residential real estate market in a New Hampshire community hosting a utility-scale solar project. Property sales and parcel records were reviewed for warranty deed single-family home transactions before and after the NHEC project. Residential market activity was also reviewed in the Town of Moultonborough before and after construction of the NHEC project. Based on the level of sales transactions and the distribution of sales, there is no evidence suggesting the overall residential real estate market activity in Moultonborough was impacted by construction of the NHEC project. This is a New Hampshire-specific example supporting the generalized finding obtained from the current body of literature research that there is no evidence of a change in property values due to utility-scale solar installations.

In addition to evaluating general potential impacts of utility-scale solar installations, the specific characteristics of the local communities that may be impacted by the Project were also assessed via a parcel analysis. Based on this analysis, 96 properties (including the seven parcels participating in the Project) may have a view of the Project from at least one point within the property based on the vegetated viewshed analysis completed by T.J. Boyle Associates (described in Section J.1 and Appendix 13). For all parcels with a potential view, 38 are classified as single-family. Of these single-family parcels, 25 are in Fitzwilliam (including the seven participating parcels), three are in Jaffrey, and five are in Rindge. Existing literature has not established a relationship between property values and utility-scale solar projects nor has the extensive study of wind power projects established a consistent, reliable relationship between

property values and electrical infrastructure. Conservatively assuming there may be a negative impact from utility-scale solar projects, the physical characteristics of the Project, specifically the low occurrence of visibility from most property locations and the aesthetic and operation characteristics, combined with the surrounding landscape characteristics, reduce the potential for visual impacts on properties in the area.

Given that the local real estate market does not appear to be distressed and historical distribution of sales are not near the Project, the risk of negative impact to the local community is small. Therefore, a negative impact disrupting economic activity at the local level is not anticipated as a result of the Project. It is possible that one or more properties may perceive negative impact, but it is unlikely that the Project will disrupt the orderly development of the local community or the region's real estate markets. The full details of the real estate analysis are included in Section 5 of the Economic Impact Assessment contained in Appendix 18.

K.2.e. Effect of the proposed facility on tourism and recreation

Tourism and recreation comprise a significant portion of the New Hampshire economy, both exhibiting continued strength and growth. Visitors come to New Hampshire to enjoy its rich and aesthetic outdoor resources; therefore, it is important to ensure any development that may potentially impact these resources is carefully evaluated.

The Project will not adversely affect tourism and recreation. A study on the Project's impact on local and regional tourism was performed to develop an estimate of the marginal change to tourism and recreational activity in the region that could be reasonably expected to occur as a result of the Project. The results of the study are described in detail in Section 6 of the Economic Impact Assessment provided in Appendix 18.

The relationship between tourism and recreation and utility-scale solar development has not been well-studied. However, there is existing research devoted to understanding the impact of wind facilities on tourism. Several studies of wind facilities have indicated the potential for increased tourism and recreation visits due to eco-tourism or curiosity where visitors are attracted to view of a wind facility.

Though no studies on the impact of utility-scale solar on tourism were identified, the User Intercept Survey, performed for the Project as part of the VIA, provided valuable information in considering potential impacts to tourism and recreation. The User Intercept Survey is contained in Appendix E of Appendix 13. The User Intercept Survey was conducted on the summit of Mount Monadnock, which is a resource of high recreational importance. Results of the survey indicated only 1% of participants may be slightly less likely to visit the site if the Project were constructed. This is considerably lower than the reported 9% that may be discouraged to visit site if a wind project were constructed (Aitchison, 2012). Such differences suggest that, at a minimum, the characteristics of the Project make it less likely to discourage visitation, which may be more broadly applicable to utility-scale solar projects in general.

Several indicators were analyzed to help understand the current state of tourism related economic activity in Fitzwilliam and the surrounding region and to provide objective measures of potential economic impact. The following indicators were reviewed: meals and rentals tax; the number of tourism/recreation related establishments; and establishments subject to meals and rentals tax. This analysis of business composition and measures of tourism spending indicates the region is slightly more dependent than the overall state on tourism and recreation.

The study also included an inventory of tourism/recreation resources that contribute to economic activity in the local area as highlighted on Fitzwilliam's website. Given the limited view of the Project as described in the VIA contained in Appendix 13, visited resources identified as important by Fitzwilliam were emphasized. A total of 7 visitor attractions in Fitzwilliam and 10 visitor attractions outside of Fitzwilliam were identified. This is not an exhaustive list but is intended to indicate the resources Fitzwilliam has deemed important to attract tourism and recreational visits to the region. None of these attractions occur within the Project area, and based on the Project's VIA, the only location identified that is anticipated to have a view of the Project is Mount Monadnock. Project visibility from Mount Monadnock is addressed in the VIA provided in Appendix 13.

Based on information obtained from literature searches, combined with observations of the local area characteristics around the Project and observations of activity around the largest utility-scale solar project in New Hampshire, there is no evidence to indicate that the region will experience a significant negative economic impact in tourism and recreation from the Project.

K.2.f. Effect of the proposed facility on community services and infrastructure

Potential impacts on community services and infrastructure in Fitzwilliam as a result of the Project were evaluated by conducting a review of community service impacts resulting from utility-scale solar projects in other New Hampshire towns. Given that the Project is located entirely within Fitzwilliam, combined with the low visibility of the Project, the community services analysis focused predominantly on Fitzwilliam.

New Hampshire communities were identified that may be useful for review related to utility-scale solar projects to determine any community service impacts as documented in public resources. Fitzwilliam's website was also reviewed for any evidence of stated community service and related cost impacts. The Towns of Moultonborough and Hinsdale have both had proceedings involving town administration on utility-scale solar, though in Hinsdale's case it has only involved a proposed project that has not yet been permitted or constructed. Public records from these communities were reviewed to identify any community services impacts and associated costs for utility-scale solar. A complete discussion of town reviews completed is provided in the Economic Impact Assessment contained in Appendix 18.

Several community impact areas were also examined as part of the community services and infrastructure analysis, including the following: administration, conservation committees, Town Clerk, and planning/zoning; assessment services; economic development; emergency responder services; parks and recreation; waste; and water or sewage.

Two areas of potential community impact with tangible costs were identified in the analysis. One of these areas relates to short-term consulting assistance for Fitzwilliam to ensure it can develop a PILOT agreement and MOU with Chinook Solar that provides the best terms possible for Fitzwilliam, while also allowing Chinook Solar to economically pursue the Project. The areas related to planning and oversight where professional consulting services are expected to be most important include assessment, legal, and engineering. A well-developed PILOT agreement and MOU will help to mitigate the risk of Fitzwilliam incurring longer term costs in legal and other professional services. The increased funding that would result from PILOT payments would be a positive economic factor for Fitzwilliam. The funds would provide additional financial flexibility to Fitzwilliam that could be applied in different combinations in the areas of property tax reduction and increased services for Fitzwilliam.

The other area of potential impact identified was long-term emergency management planning. Fitzwilliam participates in a mutual aid program to support Fitzwilliam's emergency service needs. Review of Fitzwilliam's Annual Reports indicates that the Fitzwilliam Fire Department would likely be under resourced in the event of a significant wildfire event. Additional financial resources may be required to develop an emergency plan identifying any resource gaps in Fitzwilliam's fire services and coordinating resources of the departments in the mutual aid program. Information pertaining to emergency response and fire safety is provided in Sections J.4.c and J.4.d and the Emergency Response and Fire Safety Plan contained in Appendix 16D.

K.3. Employment in the Region

The Project will have a positive effect on employment opportunities in the region both during construction and operation. As described below, the Project is expected to generate 127 FTE jobs during construction and four to six FTE jobs during operation. Further detail regarding employment benefits is contained in Section 4.3 of the Economic Impact Assessment provided in Appendix 18.

K.3.a. Number and types of full-time equivalent local jobs

As described in Section K.2.a, insufficient information was available to estimate expected employment in Cheshire County during Project construction. An economic based analysis indicated there was skilled labor availability in Cheshire County, and Cheshire County may be competitive in acquiring jobs during Project construction. Four specific industries with potential skills include: 1) power and communication line and related structure construction; 2) highway, street, and bridge construction; 3) electrical contractors and other wiring installation contractors; and 4) site preparation contractors. In 2018, approximately 320 people who may provide the types of construction services required for the Project were employed in Cheshire County.

The Project could potentially create up to 58 FTE construction jobs paying $6.1 million in wages in Cheshire County if all New Hampshire based employment during Project construction occurs within Cheshire County. Section K.3.b describes the quantity and types of jobs expected in New Hampshire as a result of the Project. This same information applies to jobs anticipated in Cheshire County if contractors based in Cheshire County are employed by the Project.

K.3.b. Number and types of full-time equivalent jobs

During construction, the Project is expected to produce 127 FTE jobs in New Hampshire. Of the 127 FTE jobs anticipated, 58 are expected to be direct construction jobs, 31 are predicted to be indirect jobs, and 38 are predicted to be induced jobs created during Project construction. Construction jobs are anticipated to be well-paying, at an average annual salary of $62,625, which is 9% higher than the average annual salary in New Hampshire. Examples of industries with indirect jobs predicted include wholesale suppliers and engineers, while examples of industries with induced jobs expected include real estate, hospitals, and full-service restaurants.

Long-term, on-going benefits from purchasing local goods and services, landowner lease payments, and tax/tax equivalent payments to local and state government are expected to result in four to six FTE jobs in New Hampshire during Project operations. Of the FTE operations jobs, 1.4 to 4 are predicted to be direct FTE jobs, 0.1 to 0.5 are expected to be indirect FTE jobs, and 1.5 to 2.5 are predicted to be induced FTE jobs. Direct jobs created from Project operations are expected to include jobs within the state and local government due to the increased tax-related revenue from the Project. Industries with indirect job increases are predicted to include wholesale trade, commercial and industrial machinery and equipment rental, and architectural and engineering services.

L. PRE-FILED TESTIMONY AND EXHIBITS SUPPORTING THE APPLICATION

For the electronic version of this Application the Pre-filed testimony and exhibits are provided as separate files and include the following:

- **Heath Barefoot (Project Director)**
- **Joseph Balzano (financial)**
- **Paul Callahan (engineering and construction)**
- **Dana Valleau and Kara Moody (environmental and permitting consultants)**
- **Joseph Persechino (engineering and stormwater consultant)**
- **Michael Buscher (visual consultant)**
- **Marc Wallace (sound consultant)**
- **Karen Mack (archaeologist)**
- **Stephen Olausen (architectural historian)**
- **Matthew Magnusson (economist)**
- **Lise Laurin (sustainability consultant)**

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