



# **NORTH SIDE ENERGY CENTER**

**Case No. 17-F-0598**

**1001.9 Exhibit 9**

**Alternatives**

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## **Exhibit 9: Alternatives**

This Exhibit will track the requirements of Stipulation 9, dated February 10, 2021, and therefore, the requirements of 16 New York Codes, Rules and Regulations (NYCRR) § 1001.9.

As documented in this Exhibit, North Side Energy Center, LLC (Applicant) has put forth significant time and effort to analyze numerous factors in order to develop the North Side Energy Center (or Project) layout that achieves the Project's objectives while minimizing impacts to the maximum extent practicable. The Project will avoid impacts to state-mapped wetlands and their mapped 100-foot adjacent areas, avoids large, contiguous forested wetlands, and sought to site Project Components in areas previously disturbed by logging or agricultural operations. These and other factors addressed below led to the Proposed Layout that will result in the development of a large-scale solar energy center that assists the State of New York in further achieving its renewable energy goals.

### **9(a) Applicable, Reasonable, and Available Alternative Location Sites**

The Article 10 regulations require that this Exhibit shall contain “an identification and description of reasonable and available alternative location sites for the proposed facility.” In determining the scope of alternatives to be considered, the emphasis is on what is reasonable, and considers the fact that a private facility is limited to sites that are owned by, or under option to, the Private Facility Applicant (or its affiliates). A Private Facility Applicant is also defined in 16 NYCRR §1000.2(ae), as an applicant that lacks the power of eminent domain. The Applicant does not have eminent domain authority and therefore is only required to describe reasonable and available sites that are owned by or under option to the Applicant.

This alternatives analysis is limited to property under the Applicant's control (i.e., solar option, solar lease, or ownership). As previously noted, the Applicant is a wholly-owned, indirect subsidiary of NextEra, which does have affiliates with other sites under control. However, the sites under the control of the Applicant's affiliates are already being considered for placement of other solar generating facilities or other types of projects. Therefore, the Applicant does not have control of other sites that are available or may reasonably be considered for this Project. Furthermore, the Project, proposed at this site, was selected by the New York State Energy Research and Development Authority (NYSERDA) to enter into agreement to sell renewable energy credits as a result of its 2019 solicitation of large/commercial scale, renewable energy projects, as part of the New York Public Service Commission's (NYPSC's) and NYSERDA's efforts to achieve the

goals in the 2015 New York State Energy Plan (SEP), amended in 2020, and the NYPSC's adopted Clean Energy Standard. Since then, the Climate Leadership and Community Protection Act (CL&CPA) has been enacted, setting more exacting and aggressive renewable goals, to which this Project will timely contribute. See Exhibit 10 for a more detailed discussion of the State's clean energy laws and programs.

Preliminary selection of solar energy locations, including the location of the proposed Project, is driven by many essential operational factors, both technical and economical. The Applicant selected the Project Area based on the following primary factors:

- Availability of the solar resource – The Project Area was identified as having a strong solar resource.
- Available land from willing landowners – The Applicant has partnered with willing landowners to develop the Project Area and has sufficient acreage of suitable land for development of a 180-megawatt (MW) Project.
- Relative ease of accessing the Project Area – The Project is easily accessible from Massena-Helena Road, Daly Road, Hopson Road, Laclair Road, Quinell Road, State Highway 420, and Brouse Road. The Applicant has identified access points along these routes that allow access to multiple parcels at one time. Additionally, the parcels that make up the Project Area are in relative proximity to one another, allowing for sharing of access roads, limiting the need for off-site features, and consolidating Project impacts to a more defined area.
- Relative ease of connecting to the existing electric transmission grid – The Project will connect to the existing New York Power Authority (NYPA) Massena – Moses 230-kilovolt (kV) transmission line via the proposed Point of Interconnection (POI) switchyard. The proposed switchyard will be located approximately 150 feet from the POI and will be connected via two aboveground 230 kV interconnection lines, approximately 151 feet and 122 feet, respectively.
- In addition, the collector substation and POI switchyard are immediately adjacent to one another, reducing the amount of transmission required for interconnection.

- Sufficient available capacity on the grid – A System Reliability Impact Study (SRIS; Appendix 5-1) indicates that the existing NYPA Massena – Moses 230-kV transmission line has the available capacity required to support the Project.

The general arrangement and layout of the Project components within the Project Area was refined based on input from stakeholders and based upon the results of key resource studies and environmental impact assessments. Additional siting considerations include general arrangement and design, alternative solar technologies, scale and magnitude of the Project, and the No Build Alternative. These additional factors are described further in 9(c).

### **9(b) Description and Evaluation of Comparative Advantages and Disadvantages of Proposed and Alternative Locations**

The Applicant does not own or have under option any other sites in New York that could be considered reasonable and available for this Project. Therefore, this Section is not applicable.

### **9(c) Description and Evaluation of Reasonable Alternatives at the Primary Proposed Location**

Based on results of the SRIS (Appendix 5-1), the anticipated transmission system capacity available in the area near participating landowners, and the NYSERDA solicitation, the Project has been designed for a nameplate capacity of 180 MW. Therefore, the objective of the proposed layout is to construct a solar energy generating facility that can produce up to 180 MW of renewable energy at the Project Area.

The Applicant used the siting parameters described in Section 9(a) and determined that the proposed Project Area is the most viable. The initial Project Area, as described in the November 2017 Public Involvement Program (PIP) Plan, included approximately 1,606 acres in the Towns of Massena, Brasher, and Norfolk. This was based on preliminary estimates of where Project components could be located due to known constraints at the time. The targeted area was in proximity to the Project's proposed POI (the existing NYPA Massena – Moses 230-kV transmission line). During refinement, the Applicant continued public outreach and was able to incorporate additional parcels with suitable buildable area within the Project Area. This allowed for an increase in the available buildable area on groups of contiguous parcels and resulted in the final Project Area of 2,241 acres.

The following subsections describe the multitude of factors considered in the siting and design of the Project at the Project Area.

### ***(1) General Arrangement and Design***

Preliminary selection of panel locations was driven by essential operational factors, both technical and economic, which are unique to siting commercial-scale solar energy projects. The arrangement of Project components within the 2,241-acre Project Area considered existing environmental constraints, previously disturbed areas from logging and agricultural activities, public health and safety concerns, engineering constraints in the area (e.g., slopes, geography), as well as a number of other variables as described within the supporting exhibits of this Application.

One of the primary considerations in development of the Proposed Layout for the Project was to avoid impacts to state-mapped wetlands and mapped 100-foot adjacent areas. The Proposed Layout avoids impacts to these state-mapped resources. Additionally, several areas of large, contiguous forested wetlands were identified in the Project Area. These areas were also avoided to the maximum extent practicable, which maintains the functions and values of these wetlands while avoiding fragmentation in these areas. Exhibit 22 contains further information regarding state-mapped wetlands in the vicinity of the Project Area.

A large portion of the Project Area has previously been used for logging and agricultural activities by the landowners. The selected arrangement of the Project was designed to minimize the potential for impacts to the factors noted above to the maximum extent practicable, while focusing on siting Project components on these previously disturbed, cleared areas. This minimizes new impacts and reduces the amount of tree clearing required for the Project, which, in turn, reduces the potential for fragmentation within the Project Area. In addition to these considerations, the Proposed Layout was designed to reduce the need for extensive grading to the extent practicable.

In addition to the factors described above and in Section 9(a), the general arrangement and design of the Project emphasized placement of Project components on parcels with contiguous proximity to one another. This reduces the need for offsite collection lines and reduces the amount of access roads required, as a single access road may be used to access multiple parcels. This also decreases the amount of security risk (e.g., fewer gate entrances), interference with existing adjacent land uses, and impacts to ecological cover types on nearby or proximate parcels.

As part of the evaluation of alternative arrangement and design, the Applicant evaluated the feasibility of siting Project components on each of the parcels for which landowner agreements were in place. As the Project Area consists primarily of previously disturbed, logged areas and

areas utilized for agricultural purposes, considerations were made to place Project Components in such areas. Although the Project is sited within mapped Agricultural Districts, the Facility will only occupy 0.12 percent (745.03 acres) of all lands designated as mapped Agricultural Districts within St. Lawrence County. Additionally, of the 1,100 acres of total limits of disturbance (temporary and permanent) proposed, only 82 acres will occur on land classified as Prime Farmland, which is only 0.5 percent of all Prime Farmland within the Towns of Massena, Brasher, and Norfolk and 0.06 of the Prime Farmland within St. Lawrence County. Further information on existing agricultural uses at the Project Area are described in Exhibit 4. The continued use of these parcels as agricultural outside of the fence line of the Project is a decision that is left up to the landowners. The Applicant is not currently aware of any agricultural operations that are proposed to continue outside the fence line of the Project. However, the Project will not disrupt current and future agricultural operations on parcels outside of the Project Area.

Once the environmental and health constraints described above were taken into account, the resulting parcels were evaluated for development of the Proposed Layout.

This Exhibit evaluates the current Project design, as shown in the Preliminary Design Drawings (Appendix 11-1) and evaluated throughout this Application as the "Proposed Layout." This layout is comprised of a sun-tracking panel racking (tracker) system. However, fixed panels may also be used in place of a tracker system within the same Project fence line.

Consideration of layouts/design options that would enable continued agricultural use:

The Project Area contains a limited amount of soils classified as mineral soil groups 1-4. Soil mineral groups 1-4 are considered to represent the most valuable and productive farmland within the State and are primarily used for the production of food and fiber, whereas soil groups 5-10 are considered to be less valuable and have limitations for agricultural production (Mulford 2020).

Within the Project Area approximately 121 acres (5 percent) of soil are classified as being within mineral soil groups 1-4 and 2,120 acres (95 percent) of soil are classified as being within soil groups 5-10. Of the 121 acres of soil within the Project Area that are classified in mineral soil groups 1-4 only one percent (1.4 acres) will be permanently impacted. This is less than 10 percent of the soils within the Project Area classified as mineral soil groups 1-4 which is in line with NYSAGM goals to limit the conversion of agricultural areas by solar development (Mulford 2020).

In addition to the mineral soils evaluation, the Applicant worked with participating landowners during the development of the Proposed Layout to determine if landowners would be interested in continuing agricultural use in certain areas during the life of the Project. The Applicant understands that the participating landowners are not proposing to continue agricultural use on parcels where Project Components are to be sited, including outside of the Project fence line. As stated above, the Applicant maximized the use of previously disturbed, non-agricultural parcels to the extent practicable when siting Project components to reduce impacts to agricultural land. As stated above, impacts to Prime Farmland have also been avoided and minimized to the extent practicable.

Following decommissioning of the Project, and discussed further in Exhibit 29 (Site Restoration and Decommissioning), the Project Area will be returned to its substantially pre-construction condition so that it is available for agriculture and other open space usage as determined by the landowner.

In addition to siting of Project components within the Project Area, the Applicant has considered ways to avoid interference with adjacent or nearby agricultural use during Project siting beyond the expressed preferences of participating landowners. For example, limiting the number of Project Area access road points off of main roads limits interference with potential adjacent farming operations in the area which may require use of the roadways to access nearby parcels, etc. As shown in the Proposed Layout (Appendix 11-1), multiple parcels can be accessed by a single access road within the Project Area and arrays and therefore avoids the need for several access points off main roads.

The Applicant also evaluated the following considerations:

- i. Consideration of safety, visual, and environmental impacts of alternative arrangements/designs that may affect state-regulated resources: The Proposed Layout as shown in Appendix 11-1 has been sited to avoid impacts to state-mapped wetlands and their mapped 100-foot adjacent areas. By the Applicant choosing to not site Project Components within state-mapped wetlands and their 100-foot adjacent areas, the land area available for the Proposed Layout was further reduced within the overall Project Area. Additionally, Project Components have been proposed in existing cleared, previously disturbed areas to the maximum extent practicable in order to minimize impacts to contiguous forested portions of the Project Area.



- ii. Consideration of alternative Project parcel sites, designs, or arrangements that would avoid or minimize impacts to wildlife and wildlife habitat, including but not limited to habitat fragmentation, disturbance and loss, and the displacement of wildlife from preferred habitat: The Project Area is composed predominately of previously disturbed agricultural and forest land. Agricultural areas consist primarily of corn and hay fields. Additionally, several forested, scrub-shrub, and emergent wetland complexes, as well as perennial streams and open water habitats exist within the Project Area. Several state and federally listed species were identified as having the potential to occur within the Project Area including bald eagle (*Haliaeetus leucocephalus*), golden eagle (*Aquila chrysaetos*), northern harrier (*Circus hudsonius*) Blanding's turtle (*Emydoidea blandingii*), sedge wren (*Cistothorus platensis*), short-eared owl (*Asio flammeus*), upland sandpiper (*Bartramia longicauda*), northern long-eared bat (*Myotis septentrionalis*), eastern sand darter (*Ammocrypta pellucida*), and Mooneye (*Hiodon spp.*). Construction-related impacts to these species will be avoided (refer to Exhibit 22). The Applicant will adhere to Certificate Conditions previously adopted by the Siting Board to provide required distances during construction.
- iii. The Proposed Layout as shown in Appendix 11-1 minimizes the amount of tree removal required to the maximum extent practicable and focuses on siting Project components on previously disturbed, logged areas and areas utilized for agricultural purposes: As noted previously, significant portions of the Project Area contain previously cleared land as part of the landowners logging operations. The Applicant sited Project components in these previously cleared, disturbed areas to the extent practicable. Areas of contiguous, forested wetlands have been avoided to the maximum extent practicable, which will avoid fragmentation of remaining forested areas and minimize impacts to existing interior forest communities. Of the entire 2,241-acre Project Area, only approximately 14 acres of wildlife habitat will be permanently lost due to the placement of Project Components. The wildlife habitat to be permanently lost currently exists in active agricultural areas, successional shrublands, successional old field/grassland communities, wetlands, interior forests, forest edge communities, and a minimal amount (approximately 0.0006 acres) within perennial streams. Some of these areas provide limited perpetual wildlife habitat due to the regular disturbances and anthropogenic pressures of active farming (Section 22(f)(4)).

- iv. Arrangements that would avoid or minimize impacts to waterbodies, wetlands, and streams: Impacts to waterbodies, wetlands, and streams have been minimized to the extent practicable. The Applicant has avoided impacts to state-mapped wetlands as shown on the Preliminary Design Drawings (Appendix 11-1). There are only 7.33 acres of permanent wetland impacts (of the 1,504.49 acres of wetlands delineated) proposed within the Project Area, much of this affecting forested and emergent wetlands located amongst both active and inactive agricultural fields and previously logged areas, some of which are disturbed by agricultural practices. These wetlands are described further in Exhibit 22 and Appendix 22-5 (Wetland and Stream Delineation Report).

As can be seen on the Preliminary Design Drawings in Appendix 11-1, there are several large wetland complexes, mapped by the NYSDEC, that were avoided in the design of the Project. This avoidance has been achieved both by siting Project components beyond these wetlands and by proposing Horizontal Direction Drilling (HDD) wherever practicable to prevent disturbance that would have otherwise been unavoidable with surface activities. The Applicant worked to minimize impacts to waterbodies.

All practicable measures will be taken by the Applicant to avoid, minimize, and mitigate any impacts to surface waters through the measures adopted in the Project's Stormwater Pollution Prevention Plan (SWPPP) and Spill Prevention and Containment (SPC) Plan.

- v. Arrangement of inverters away from property lines: The Proposed Layout sites inverters away from Project Area boundaries to the maximum extent practicable. The location of Project's Components was selected after considering several factors. The primary reason for siting inverters in their proposed locations, including near property lines, was to minimize impacts to wetlands. Inverters were grouped together in upland areas in an overall Project effort to minimize impacts to wetland areas to the maximum extent practicable. There are fifteen Project inverters requiring sound mitigation. The necessary level of mitigation can be achieved through use of sound barriers. Relocating these fifteen inverters was also considered, which would eliminate the need for sound barriers. However, this would require the inverters to be sited in wetland areas, creating additional wetland impacts. Therefore, by proposing sound mitigation,

the Applicant is able to further minimize impacts to wetland areas. Refer to Exhibit 19 for a detailed sound analysis.

- vi. Consideration of alternative perimeter fencing designs that would minimize contrasts with adjacent land uses and visual character: Fencing is proposed as close as feasible to the solar arrays, while still allowing access for maintenance and emergency services. Barbed wire is not proposed on the array's perimeter fencing and will only be used at the Project POI Facilities. Alternative perimeter fencing designs were considered. However, the fencing for the Proposed Layout was selected due to substantive local zoning requirements and safety considerations. Fencing will be located around Project components and has been evaluated as part of the visual assessment in Exhibit 24. Additionally, landscaping efforts to minimize visibility of Project components from public vantage points and adjacent residential uses is included on the Landscaping Plan included in Appendix 11-1.

The Project Area is in a rural location with a limited number of adjacent landowners. Siting has been designed to avoid placement of components adjacent to homes and structures on parcels of landowners expressing concerns. Additionally, all arrays will be set back a minimum of 83 feet from non-participating residences, thereby providing significant setbacks from adjacent landowner's residences.

- vii. Alternative designs for accommodating existing or planned alternative agricultural production projects: Active agriculture exists on 526.19 of 2,241 acres in the Project Area. Project components are proposed on 413.92 acres of agricultural land. As noted above, the participating landowners will not be continuing existing agricultural practices on parcels where Project components are sited. Additionally, there are no known planned agricultural uses proposed for which the Project would interfere. At the discretion of the landowner, and following decommissioning and restoration, agricultural activity may resume.

## ***(2) Technology***

Solar panel technology is rapidly evolving, and the market conditions at the time procurement decisions need to be made are unknown at this time. Therefore, the Applicant is considering both a fixed and a tracker solar racking technology. The Proposed Layout (Appendix 11-1) depicts a tracker design, which represents a more conservative estimate of impact given that tracker

systems generally require more land grading (to accommodate rotational movements) and also set higher off the ground (13-foot maximum height at full-tilt as opposed to 8-foot maximum height for fixed). A final racking technology decision will be made and detailed in the Compliance Filing. The tracker or fixed racking systems to be used would be similar to the Gamechange Genius Tracker or Maxspan™ Pile Driven System, specification sheets of which have been included in Appendix 2-1. Regardless of the type of array racking system ultimately selected for the Project, the Applicant intends to utilize a solar module similar to the Jinko Solar Eagle 72HM G2 380-400 Watt Mono Perc Diamond Cell. A specification sheet for this module has been included in Appendix 2-1. Only selected elements of the Project would change based upon the array racking system types used, but all changes would be within the component fence line and to the same land uses shown in the Proposed Layout. The location of interior access roads and inverters, depending upon the final locations, could differ from that shown in the Proposed Layout (Appendix 11-1). Land coverage ratios will also be adjusted but they are not expected to be substantial or significant as land uses are not expected to change in these locations between Application filing and finalization of the Compliance Filings. Thus, choosing either racking technology would not cause any significant adverse environmental impacts.

Accordingly, the drawings, plan and maps provided in Exhibit 11 depict a layout with only tracker array systems.

It should be noted that the proposed height of the tracker racking system and solar module (13 feet at full-tilt) are based upon products that are currently commercially available. It is possible that additional products become commercially available between the time of this Application filing and product procurement prior to construction. These future product's dimensions may or may not vary from those that are presented above. If larger solar modules become available, they would require a taller tracker racking system in order to provide adequate ground clearance. The Applicant anticipates this could result in a maximum height at full-tilt of up to 18 feet. And while there may be an increase in height, it is entirely possible that the solar module could also have a greater generating capacity which, in turn, could potentially lead to a reduction in the footprint required for siting the solar arrays. However, it is impossible to determine the specifics of these potential variations at this time until products become commercially available. Therefore, the Application has been based on those documented above and presented as appendices to Exhibit 2 with a maximum height of 13 feet.

### ***(3) Scale or Magnitude***

The scale and magnitude of the Project is limited to the development of a 180-MW solar project consistent with the Applicant's contract with NYSERDA to sell renewable energy credits. This capacity was studied and approved by the NYISO for interconnection into the bulk transmission system. Generally, approximately 5 to 10 acres of land are required to generate 1 MW of energy under New York State solar conditions.

### ***(4) Alternative Turbine Layouts***

Alternative turbine layouts are not applicable as the Project does not involve wind power facilities.

### ***(5) Timing of the proposed in-service date for the Project in relation to other applicable planned additions, withdrawals, or other capacity, transmission or demand reduction changes to the local electric system.***

The Project's proposed in-service date is no later than December 2023. This date is required through the Applicant's Renewable Energy Certificates (REC) contract with NYSERDA. As documented in the SRIS provided in Exhibit 5, the New York Independent System Operator (NYISO) has determined that the Project will have no adverse impacts on the reliability of New York's transmission system. Upon completion, the Project will immediately provide benefits to New York State by providing clean, renewable electric generation, thus advancing the State's renewable energy goals.

### **9(d) Why the Project Location Best Promotes Public Health and Welfare**

As discussed further in Exhibit 15 (Public Health and Safety), the Project will not result in adverse impacts on public health and welfare. The Project Area and proposed locations for Project components best promotes public health and welfare for multiple reasons, including a reduction in air pollution (further described in Exhibit 17 (Air Emissions)). Once operational, the proposed Project will help achieve state energy goals using a clean, renewable source of fuel (solar). Additionally, the Project will diversify New York's energy supply while reducing the amount of electricity that New York produces through fossil fuel generation. The Project will use no water and require no fossil fuel or fuel transport to operate, which also promotes public health compared to conventional energy generation. These factors support human health and are good for the climate in light of the current dangers posed by climate change.

After balancing siting constraints and available land, the Applicant was able to apply adequate setbacks to adjacent non-participating residents. Glare to airports, roadways, and residences has been avoided or minimized to the maximum extent practicable, as discussed in Exhibits 15 and 24. The solar arrays are also proposed on leased private property. Therefore, public access to the Project is limited and impacts to recreational uses are nil.

The Project will also result in an increase in local revenues that can be used to promote public welfare. The contribution to the local school district, through payments in lieu of taxes (PILOT), will create better facilities and opportunities for students where needed. The contributions to the county and towns can be used to improve roads, infrastructure, and emergency services in the area. Additionally, there will be positive short-term economic impacts during construction from jobs and spending and then during operation, from permanent jobs, including Project employees, outside mowing, and snow removal services over 30 years, that will be created and that will provide a local positive economic benefit.

Solar project payments to landowners through leases will help stabilize revenues for local participating landowners. These include payments to farmers which reduce the effects the farmers endure as crop and dairy prices often fluctuate from year to year and are particularly volatile in the current economic condition, as well as logging operations which have historically occurred at the Project Area and are not proposed to continue. Payments paid to landowners are typically reinvested in the community, helping to create jobs and improve the local economy.

The Proposed Layout assumes that the Project remains a 180-MW Project. If the Project size was reduced, energy production would decrease, which would not provide the emission reductions that a 180-MW project would allow.

#### **9(e) Why the Project Design, Technology, Scale, and Timing are Best Suited for Public Health and Welfare**

The Project design, technology, scale, and timing best promote public health and welfare for a number of reasons. Numerous studies and countless hours went into the design of the Project to maximize the effectiveness of the panel arrays as well as to ensure that they are located in areas within the Project Area that are safe and that pose no harmful health effects to landowners in the area. Wetland and water surveys, health and setback analyses, and more all went into the siting and design of the Project to ensure that public health considerations were addressed so that the Project will be built with a design and in a manner that will not impose health burdens upon people

in the area. Further, the Project design encompasses industry best standards and will use the existing resources in the area to the maximum extent practicable in order to produce clean energy efficiently while also creating jobs in the area allowing the Project to contribute economically to the community.

Currently, the 180-MW Project is limited to installation of panels within the 981-acre fenced area of the 2,241-acre Project Area. A larger project would require the development of more land increasing the overall environmental impact. On the other hand, a larger project would have a larger economic benefit, but it may not be feasible to build a larger project because of the upgrades that may be required to the transmission grid. Alternatively, a smaller scale project would not satisfy the agreement executed with NYSERDA for the sale of RECs. The size of the Project, therefore, was selected in order to maximize the technical viability of solar technology, the land parcels to which the Applicant was able to obtain the necessary development rights, the generation of RECs for NYSERDA pursuant to the executed agreement, and overall economic viability of the Project so that it can deliver the above local benefits with greater certainty.

Finally, with regards to timing, as previously noted, the Project has been awarded a contract under NYSERDA's Renewable Portfolio Standard Program Purchase of Renewable Energy Attributes for 180 MW of capacity. Large-scale renewables are a critical component in achieving New York State's energy goals of 70 percent renewable power by 2030, a 40-percent reduction in greenhouse gas emissions from the electric generation sector by 2040 and zero emissions from electric generation by 2040. This Project will produce clean energy, reduce overall emissions in the State and help New York achieve its goals. A delay in the timing will jeopardize the Project's NYSERDA contract and impede, rather than facilitate, the State's ability to meet its goals.

#### **9(f) Description and Evaluation of No Action Alternative**

The "No Action Alternative" assumes that the Project Area would continue to exist as previously logged, disturbed land with continued logging operations and agricultural use. This would also assume that the Project is not built. Under this scenario, nothing immediately changes versus current conditions and current uses (primarily agricultural and logging) in the area.

The No Action Alternative means that the local communities receive no benefits from the hosting of a large/commercial scale solar project. The No Action Alternative also means that the county, towns, and local schools would not receive PILOT payments which could have a tremendously positive impact on the community and local economy while diversifying their revenue streams.

PILOT revenue can be used locally to improve roads and other infrastructure, to improve emergency and other necessary community services, and to potentially reduce local taxes. The Project is also expected to create approximately 200 local jobs (peak) in construction trades and one to two permanent operation and maintenance jobs, which will also have a positive impact on the local economy. If the Project is not built, the regional economy would not benefit from having construction workers frequenting local restaurants and hotels, or shopping in St. Lawrence County stores.

The No Action Alternative also would not promote New York State's energy policy directives as contained in the recently enacted CL&CPA, would not contribute to the SEP's goals, and would not help to meet the NYPSC's adopted Clean Energy Standard. In order to meet the State's goals and objectives, more renewable energy projects must be built, and with the NYSEERDA contract the North Side Energy Center is a viable, large-scale clean energy project that can be licensed successfully in New York State and should be included in the State's future energy mix to deliver RECs to NYSEERDA.

Although logging may continue at the Project Area under the No Build Alternative, the economic opportunity afforded both the landowner and the larger community through payments as part of the solar project would contribute to an area which would otherwise face an economic loss.

There are limited recreation opportunities for the public at the Project Area. Therefore, the impact to recreational uses is minimal to non-existent and limited only to those allowed by the private landowners. The No Action Alternative would, therefore, not significantly improve recreational opportunities at the Project Area.

The minimal impacts of the Project, as described within this Application, are recognized but are significantly outweighed by the Project's positive economic, health, and environmental advantages. The No Action Alternative, therefore, is a materially inferior option.

### **9(g) Identification and Description of Alternative Energy Supplies**

As previously stated, the Applicant has been awarded a contract for this Project under NYSEERDA's Renewable Portfolio Standard Program Purchase of Renewable Energy Attributes. This award is specifically for the development of a solar energy facility in New York State, and not another alternative energy supply. In support of NYSEERDA's award for this solar Project, contracts with landowners for this Project are exclusively for a solar energy project. Therefore,



alternative energy supplies are not a reasonable nor viable alternative, and energy supply sources other than solar energy are not considered in this Application.

#### **9(h) Transmission and Demand-Reducing Alternatives**

Due to the private nature of the Project, and the objectives and capabilities of the Applicant, (i.e., solar powered electric generation), transmission and demand-reducing alternatives are not evaluated in this Application.

#### **9(i) Why the Project is Best Suited to Promote Public Health and Welfare**

Various siting constraints dictate the size and layout of a solar energy project. The proposed Project has been designed with consideration given to the important balance between the increased need for clean electrical energy generation and the protection of public health and welfare. The placement of Project components has been researched, reviewed and scrutinized in the development and engineering process to avoid and minimize negative impacts and to incorporate extensive siting considerations including (but not limited to) landowner requests, solar resource, constructability, and avoidance (or minimization) of impacts to wetlands, streams, state-listed species, and agricultural land.

The Project location, design, technology, scale, and timing each take into consideration and promote public health and welfare. The Applicant has done its best to balance the goals of the State and the Project with the goals of the community and the local landowners. Careful consideration was given to impacts potentially affecting known onsite resources, and time and attention was dedicated to minimizing negative impacts and maximize positive benefits, to ultimately to arrive at a Project that is best suited for this area, for this community, and for the State of New York.

#### **9(j) Impacts to Vegetation**

Where development is proposed, the Project Area consists primarily of agricultural land and previously logged areas, and therefore, impacts to vegetative communities would be similar whether the Proposed Layout or other alternative arrangements were considered. Solar panels have been proposed in areas already disturbed by agriculture and past logging activities to the maximum extent practicable. The ability of the Project Area to reduce soil erosion will be bolstered in areas where grass cover will more broadly cover the surface (e.g., in place of row crops with exposed soil). Additionally, linear Project components, such as access roads and collector lines,

have been co-located to avoid and minimize impacts to plant communities. At the end of the useful life of the Project, the Decommissioning and Restoration Plan, presented in Exhibit 29, will allow the Project Area to be restored to substantially their pre-construction conditions.