



# **HIGH RIVER ENERGY CENTER**

**Case No. 17-F-0597**

**1001.9 Exhibit 9**

**Alternatives**

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## **Exhibit 9: Alternatives**

This Exhibit will track the requirements of proposed Stipulation 9, dated August 26, 2019, and therefore, the requirements of 16 NYCRR § 1001.9.

### **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 Applicant 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. The sites under the control of Applicant’s affiliates that are not being considered for solar development are not suitable for solar projects and instead are currently being developed for other types of projects. Furthermore, the Project 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 2017 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) 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. High River Energy Center 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 – High River Energy Center has partnered with multiple willing landowners to develop the Project Area and has sufficient acreage of suitable land for development of a 90 MW Project.
- Relative ease of accessing the Project Area – The Project is easily accessible off Pattersonville Road and multiple existing roadways. Additionally, the Applicant has worked with participating landowners to identify access routes, such as Hutchinson Road, which allow access to multiple parcels at one time. 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 National Grid Stoner – Rotterdam #12 transmission line via the proposed Point of Interconnection (POI) switchyard and an approximately 50-foot 115 kV interconnection line which will be easily accessible off Pattersonville Road. 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; see Appendix 5-1) indicated that the existing National Grid Stoner – Rotterdam #12 transmission line has the required available capacity to support the Project.

The general arrangement and layout of the Project 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, other solar technology, scale and magnitude of the Project, and the No Build Alternative. These additional factors are described further below in 9(c).

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

As described in Section 9(a) above, 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 (see 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 90 MW. Therefore, the objective of the Proposed Layout is to construct a solar energy generating facility that can produce up to 90 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 880 acres in the Town of Florida, which was based on preliminary estimates of where Project Components could be located due to known constraints. The targeted area was in proximity to the Project's proposed point of interconnection (the National Grid Stoner – Rotterdam #12 transmission line). In order to ensure that the Project Area contained sufficient acreage to properly site Project Components, the Applicant continued outreach efforts, and after strongly considering direct feedback from concerned citizens near the Project Area, expanded the Project Area to 1,221 acres within the Town of Florida (the current Project Area) through agreements with participating landowners to further minimize potential impacts to adjacent landowners. The addition of 341 acres to the Project Area allowed for greater flexibility to site Project Components while accounting for input from the public, and consideration of site constraints such as topography and environmentally sensitive areas. During refinement of the Project Area, the Applicant continued public outreach and discussions with landowners and Town officials, as well as through Open Houses.

The following subsections describe and evaluate multiple factors considered in the design of the Project at the Project Area.

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

Preliminary selection of panel locations was driven by many essential operational factors, both technical and economical, and which are unique to siting commercial-scale solar energy projects.

The arrangement of Project Components within the 1,221-acre Project Area considered existing environmental constraints, public health and safety concerns, and engineering constraints in the area, such as slopes, geography, elevation, topography, as well as a number of other variables as described within the supporting exhibits of this Application. Importantly, community feedback was a strong consideration.

Consequently, the selected arrangement of the Project was designed to minimize the potential for impacts to those noted resources to the maximum extent practicable, while reducing the need for extensive grading, land clearing, and site fragmentation within the Project Area. Aside from 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 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 decreases the amount of security risk (e.g., fewer gate entrances) and interference with existing land uses (including agricultural operations) and ecological cover types on nearby or proximate parcels. Considerations were also made to enable the continued agricultural use of areas where Project Components would not be placed. 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 are in place. Once the environmental and health constraints described above were taken into account, the resulting parcels were evaluated for development of the final layout. The current Project layout (the Proposed Layout) is represented on the mapping and figures included within the Application.

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.” Figure 9-1 presents an Alternate Layout depicting all fixed panels. Alternative layouts within the Project Area are also considered but are not initially proposed as described herein and shown in Figures 9-2 through 9-6 (Alternate Layouts). The primary considerations on Alternate Layouts and designs for the Project are described below in further detail.

- i. Consideration of layouts/design options that would enable continued agricultural use:  
The Applicant has worked closely with participating landowners during the development of the Proposed Layout to allow continued agricultural use, as requested by participating landowners, to the maximum extent practicable. Through coordination with the landowner in Area 5, panels were placed as shown on the Proposed Layout

(Appendix 11-1) to allow continued agricultural operations (i.e., hay production) outside of the fence line. The intent of the Proposed Layout is to minimize fragmentation of surrounding hayfields and allow continued use of land outside of the fence line. Upon preparation of the Proposed Layout, the Applicant continued conversations with the landowner in Area 5 who indicated that some slight modifications to the layout in Area 5 would allow for increased access to fields used for hay production over the Proposed Layout. Figure 9-2, below, identifies a proposed modification to the Proposed Layout in Area 5, which would remove some panels from the field used for access for hay production (red square) and add them in a property which is not being used for agricultural production (green square). The Applicant is currently evaluating this modification.



Figure 9-2. Alternate Layout to Maximize Access for Hay Production in Area 5

The Applicant also worked with a participating landowner in Area 3 regarding placement of Project Components to allow continued agricultural use outside of the fence line. The landowner required locations to either graze cattle, produce hay, or spread manure, and the Applicant worked closely with the landowner through multiple iterations of layouts in Area 3 to ensure that the landowner could continue some agricultural use of the land, to the greatest extent practicable. The Proposed Layout (Appendix 11-1) shows the final layout as a result of those conversations, which allows for the movement of cattle or farm equipment within the landowner's property to the north of Bulls Head Road. Additionally, the Applicant coordinated with the landowner to ensure that access to this area was sufficient and developed a path to access the

grazing portion of the landowner's property. This layout also reduced the number of panels being placed in the open area, as these panels were moved farther north on the landowner's property, which decreased the number of panels and Project Components in the vicinity of non-participating landowners along Bulls Head Road. Figure 9-3, below, shows the fence line (blue square) in Area 3 prior to creation of the cattle path and grazing area.

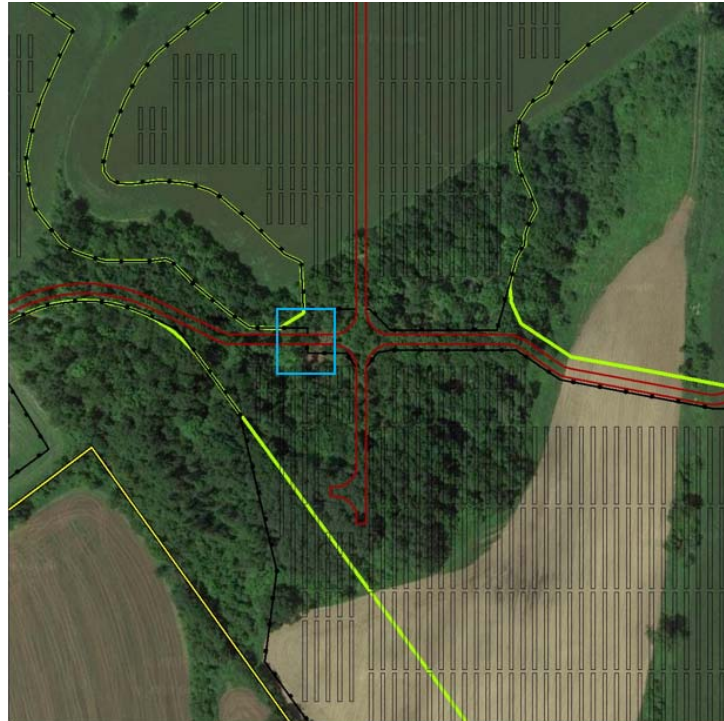


Figure 9-3. Alternate Layout with Fence Line Blocking Cattle Path

Through coordination with the participating landowner in Area 6, existing bee keeping operations were identified. The Applicant worked with the participating landowner in Area 6 to site panels away from the existing bee keeping operations to allow for continued production. The landowner has indicated that this operation is used primarily for commercial production of honey, and by siting Project Components away from this operation, it will allow for continued production and ease of access by the landowner.

- ii. Consideration of input from local residents to expand setbacks: After feedback was received from local residents and town leadership, additional land was sought in order to potentially remove Project Components that were located in proximity to non-participating residences along Bulls Head Road and Mohr Road.



Along Bulls Head Road, as was previously noted, the original layout proposed panels on participating land to the north of multiple non-participating residences. This location was included in the original buildable area presented for the Project as the land required only minor grading and tree removal and had limited other environmental impacts. Through coordination with residents along Bulls Head Road in proximity to the proposed buildable area, the Applicant sought to find additional locations within the Project Area to place the panels which would allow for an increase of setbacks from Project Components to these residences. As described above, this involved coordination with the participating landowner to ensure that agricultural operations would still be feasible on the remaining available and buildable acreage. By balancing these two interests, the Applicant was able to relocate these panels to the northern portion of the Project Area (Area 2A in the Proposed Layout as shown in Appendix 11-1) to create space within the orange outline in Figure 9-4, below, for agricultural operations.



Figure 9-4. Original Buildable Area North of Residences Along Bulls Head Road

Additional similar comments were received from non-participating landowners along Mohr Road. The Applicant worked with participating landowners in this area to increase setbacks from non-participating residences by adjusting the buildable area. As this required finding additional areas within the Project Area to place panels required to support Project output, the Applicant coordinated with participating landowners to place panels on participating properties that would increase setbacks from those residences along Mohr Road, as requested through public input. Figure 9-5, below, shows the original buildable area along Mohr Road. The current layout can be seen in Appendix 11-1.



Figure 9-5. Alternate Panel Placement Along Mohr Road

The Applicant also consulted with and received feedback from town leadership regarding panel placement along Thayer Road. Specifically, it was requested that Project Components be moved further away from Thayer Road in order to allow them to be screened by the existing hedgerow which runs parallel to the road. The Applicant worked closely with the participating landowner in this area and was able to arrange the panels to accommodate this request from the Town of Florida. Figure 9-6 shows the alternative before this feedback was incorporated.

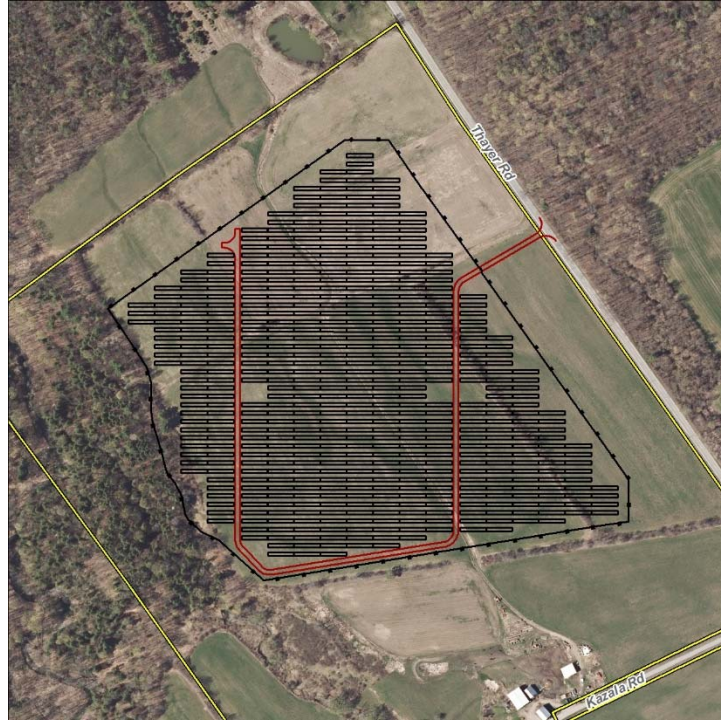


Figure 9-6. Original Panel Placement Along Thayer Road

- iii. 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: No threatened, endangered, candidate, rare plant species, or significant ecological communities were identified at the Project Area. The Project Area consists primarily of agricultural land, with limited suitable habitat for wildlife species. Other potential habitats within the Project include lesser amounts of forest land and successional old field, which are limited in quality at the Project Area.

The Proposed Layout as shown in Appendix 11-1 minimizes the amount of tree removal required to the maximum extent practicable. Several forested locations within the Project Area, including hedgerows, were specifically avoided to ensure that tree removal was limited. Although the existing parcels have endured forest fragmentation from agricultural operations, the minimization of tree clearing will further reduce the amount of potential habitat fragmentation in the Project Area as a result of the Project. Exhibit 22 contains additional information regarding habitat types and proposed impacts as part of the Project. As described in Exhibit 22, 15.1 of the 16.3 acres (93%) of identified wildlife habitat permanently lost due to the Proposed Layout is located in

active agricultural areas which already provide limited wildlife habitat due to the regular disturbances and anthropogenic pressures of active farming practices (see Exhibit 22, Section 22(f)(4)).

- iv. Arrangements that would avoid or minimize impacts to waterbodies, wetlands, and streams: Through careful siting of Project Components, impacts to waterbodies, wetlands, and streams have been minimized to the extent practicable. There are only 0.12 acre of temporary impacts and 0.06 acre of permanent wetland impacts proposed within the Project Area. Additionally, there are no impacts to NYSDEC wetlands or their 100-foot adjacent areas (see Exhibit 22, Section 22(m)). A total of 37.5 acres of wetlands were delineated within the Project Area. 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 areas where wetlands were specifically avoided in the design of the Project. As can be seen, more areas of contiguous panels could have been employed if these wetland areas were impacted; however, the Applicant worked diligently to avoid these areas to the maximum extent practicable.

As described further in Exhibit 23, there will be a total of 14 waterbody crossings required as part of the Project. Of the total waterbody crossings, none will include impacts to NYSDEC-protected waterbodies. Similar to wetlands, the Applicant worked to minimize impacts to waterbodies to the maximum extent practicable. 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, Containment, and Countermeasure (SPCC) Plan.

- v. Arrangement of inverters away from property lines: Both the Proposed Layout and the Alternative Layouts site inverters away from Project Area boundaries. As inverters for the Project will be centrally located within the arrays and away from Project boundaries, access roads to the inverters have been sited within both layouts to maximize the ability to use one access road to access many array and inverter locations where practicable. Where this was not practicable due to parcel size,

additional sound walls are planned to eliminate impacts to potentially sensitive receptors.

- 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. Alternative perimeter fencing designs were considered; however, the fencing for both the Proposed and Alternate Layouts was selected due to substantive local 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, including fencing, from public vantage points and adjacent residential uses is included on the Landscaping Plan in Appendix 11-1.
  
- vii. Consideration of alternative vegetative screening designs that would provide additional visual screening to more frequently travelled roads: Vegetative screening is proposed to shield the views from receptors with predicted visibility, including dwellings and roads. A Landscape Architect designed two types of vegetative screening buffers which use native trees and shrubs to match the natural vegetation of the area. Please refer to Appendix 11-1 for the Landscaping Plan. To provide further screening on Pattersonville Road, instead of the Type 1 screen which consists approximately 35 more trees than Type 2, a special planting area is employed which consists of a similar planting scheme and similar tree species but, proposes to use sizes at planting (especially for all evergreen tree species) that are approximately 2 to 3 feet taller than those in Type 1, to give more effective screening at the time of installation compared to Type 1. Please refer to Page L-005 of Appendix 11-1 which highlights the differences between Type 1, 2, and the special planting area.

## **(2) Technology**

The Project proposes to install fixed, tracker or a combination of both types of racking systems. As the technology is rapidly evolving for solar panel technology, and market conditions at the time procurement decisions need to be made are unknown at this time, the Applicant is proposing in this Application to evaluate both types of racking systems, with the final decision to be made and detailed in the Compliance Filing. The fixed and tracking array racking systems to be utilized

would be similar to the Gamechange Maxspan™ Pile Driven System and the Gamechange Solar Genius Tracker™, respectively, specification sheets of which have been included in Appendix 2-2. 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 combination of 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 Exhibit 11 plans. Land coverage ratios will also be adjusted but they are not expected to be substantial or significant. Again, land uses are the same in all locations.

Accordingly, the drawings, plan and maps required by Exhibit 11 depict a combination of both panel types, fixed and tracker. Approximately 50% of the panels are fixed and 50% are trackers. As indicated previously, Figure 9-1 presents a site plan depicting all fixed panels.

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

The scale and magnitude of the Project is limited to the development of a 90 MW solar project. That capacity is stated in the NYSERDA Renewable Energy Credits (REC) contract. In addition, that capacity was studied and approved by the NYSIO for interconnection into the bulk transmission system. Generally, approximately 5-10 acres of land are required to generate one MW of energy under New York State solar conditions. As described in Section 9(a), in response to input received during public outreach, the Project Area was expanded following submittal of the PIP Plan to increase the amount of area available on which to properly site Project Components; however, the generating capacity of the Project (and subsequent acreage required for development) was not changed.

**(4) As the Project does not involve wind power facilities, alternative turbine layouts are not applicable to the Project.**

**(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 November 2021. This date is required through the Applicant's 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 significant 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.

As described above in Section 3(c), there are multiple factors that make the Proposed Layout superior over the Alternate Layouts discussed. The Proposed Layout is superior to the Alternate Layouts because it allows for further agricultural use, provides greater setbacks from adjacent landowners located on Bulls Head Road, Mohr Road, and Thayer Road, minimizes impact on habitat, wetland and forested areas to the maximum extent practicable, places inverters away from property lines, provides greater screening from public viewpoints especially on Pattersonville Road, and uses technology that minimizes impact to soils.

#### **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 needs 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. These factors support human health and are good for the climate in light of the current dangers posed by climate change.

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. In addition, as described in Exhibit 4, impacts to recreational uses have been avoided to the maximum extent practicable.

Glare to airports, roadways, and residences has been avoided or minimized to the maximum extent practicable, as discussed in Exhibits 15 and 24.

To ensure that the Project at the proposed location minimizes effects on public health and welfare to the maximum extent practicable, the Applicant has evaluated and applied setbacks which minimize any potential effects. These measures will ensure that there is limited risk to public health and safety, while also serving to minimize annoyance of local residents due to sound or

visual factors. The solar arrays are also proposed on leased private property. Therefore, public access to the Project is limited.

The Project will also result in an increase in local revenues that can be used to promote public welfare. The contribution to local school districts, through payments in lieu of taxes (PILOT), will create better facilities and opportunities for students where needed. The contributions to the county and town 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 lease help stabilize revenues for local participating farmers (as crop and dairy prices often fluctuate from year to year) and payments paid to landowners are typically reinvested in the community, helping to create jobs and improve the local economy. The Proposed Layout and Alternate Layouts discussed above in Section 3(c) both assume that the Project would remain a 90 MW Project. If the Project size was reduced, energy production would decrease, which would not provide the emission reductions that a 90 MW project would allow.

Finally, the Applicant has proposed a number of additional initiatives through at Host Community Agreement and Education and Workforce Development Program proposal that would provide annual funding for programs that are tailored to the needs of the community including but not limited to STEM education, innovation and entrepreneurship, and start-up funding for local companies. These conversations are ongoing with the County Executive, School Superintendent, Town Supervisor, and County IDA, among others, and the programs will evolve as input is received from local stakeholders.

#### **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 at locations 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 and 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 utilize the existing resources in the area to the maximum extent practicable in order to produce clean energy efficiently which will create jobs in the area and allow the Project to contribute economically to the community.

Currently, the 90 MW Project is limited to installation of panels within the 479-acre fenced area of the 1,221-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 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 had been awarded a contract under NYSERDA's Renewable Portfolio Standard Program Purchase of Renewable Energy Attributes for 90 MWs 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 2050. 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 agricultural, forested, and rural residential land and that the Project is not built. Under this scenario, nothing immediately changes versus current conditions and current uses (primarily agricultural) 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,

town, 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 up to 200 local jobs in construction trades and two to three permanent operation and maintenance jobs, which will also have a positive impact on the local economy. Furthermore, a No Action Alternative would not deliver the Host Community and Education and Workforce Development benefits to the local economy, assuming that the Applicant could reach an agreement with the appropriate stakeholders.

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 State Energy Plan'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 need to be built, and with the NYSERDA contract the High River 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 and deliver RECs to NYSERDA.

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

The minimal impacts of the Project, as described within the 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 NYSERDA's Renewable Portfolio Standard Program Purchase of Renewable Energy Attributes. This award is specifically for the development a solar energy facility in New York State, and not another alternative energy supply. In support of NYSERDA'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 will not be 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**

As mentioned previously, 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, and agricultural land.

As previously discussed in this Exhibit, 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 including, but not limited to, environmental, aesthetic, agricultural, and time and attention was dedicated to working with stakeholders to minimize negative impacts and maximize positive benefits, 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**

The Project Area consists primarily of agricultural land, and therefore, impacts to vegetative communities would be similar whether the Proposed Layout or other alternative arrangements were considered. As discussed in Exhibit 22, the Project Area consists predominately of active agricultural land. The ability of the Project Area to reduce soil erosion will be increased 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. Solar panels have been proposed in areas already disturbed by agriculture to the maximum extent practicable. As discussed in Section 9(c)(1)(i), the layout and design of the Project allows continued agricultural use up to the perimeter fencing of the Project and is at the discretion of the landowner. The

Decommissioning and Restoration Plan, required by Exhibit 29, will help restore disturbed areas to substantially their pre-construction conditions.

In order to further minimize impacts to vegetative communities, the siting of Project Components focused on avoiding unnecessary impacts to grasslands, interior forests, wetlands, shrublands, and young successional forests. As a result, impacts to these landscape features (and vegetation communities) will be marginal.