



GARNET ENERGY CENTER

Case No. 20-F-0043

1001.9 Exhibit 9

Alternatives

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Exhibit 9: Alternatives

This Exhibit will track the requirements of Final Stipulation 9, dated March 5, 2021, and therefore, the requirements of 16 New York Codes, Rules and Regulations (NYCRR) § 1001.9.

As documented in this Exhibit, Garnet Energy Center, LLC (Applicant) has put forth significant time and effort to analyze numerous factors in order to develop the Garnet Energy Center (Garnet Energy Center or Project) layout that takes into account stakeholder's concerns while achieving the Project's objectives and minimizing impacts to the maximum extent practicable. The Project will provide significant setbacks from residences (minimum 250 feet) and adjoining property lines, will avoid areas of steep slopes to reduce the amount of earthwork required, will avoid impacts to state-regulated resources to the maximum extent practicable, and will facilitate participating landowner requests that allow continued agricultural production. The Applicant sought to site Project Components in order to minimize impacts to wetlands, avoid areas of steep slopes, and to locate them in areas previously disturbed by 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 New York State 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 Energy Resources, LLC (NEER), 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 an agreement to sell renewable energy credits (RECs) 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 (CLCPA) 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. Garnet 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 – Garnet Energy Center has partnered with multiple willing landowners to develop the Project Area and has sufficient acreage of suitable land for development of up to a 200-megawatt (MW) Project with a 20 MW/4-hour duration energy storage system.
- Relative ease of accessing the Project Area – The Project is easily accessible from Slayton Road, State Route 38, Cooper Street, Drake Road, Spook Woods Road, Montana Road, Bush Hill Road, Lake Road, O'Neil Road, Egypt Road, and Schooley Road. Additionally, the Applicant has worked with participating landowners to identify access points along these routes to 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 southern transmission line within the existing New York Power Authority (NYPA) Clay to Pannell 345-kilovolt (kV) transmission line right-of-way (ROW) via the proposed Point of Interconnection (POI) switchyard via two new transmission lines of approximately 207 feet and 563 feet, respectively, that will be easily accessible off Cooper Street. 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 Clay to Pannell 345-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 included general arrangement and design, alternative solar and energy storage 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

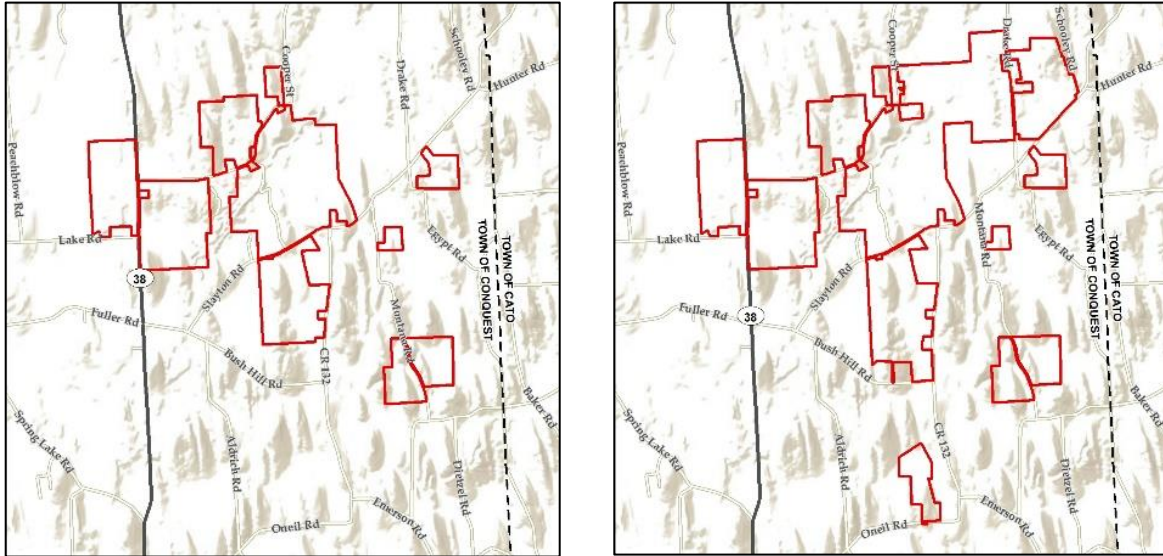
The Applicant does not own or have under option any other sites in New York that could be considered reasonable and available for this Project. Therefore, this section is not applicable.

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

Based on results of the SRIS, the anticipated transmission system capacity available in the area near participating landowners, and the NYSEERDA solicitation, the Project has been designed for a nameplate capacity of up to 200 MW with a 20 MW/4-hour duration energy storage system. Therefore, the objective of the Proposed Layout is to construct a solar energy generating facility and energy storage system that can produce up to 200 MW of renewable energy and provide a 20 MW/4-hour duration energy storage system 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 March 2020 Public Involvement Program (PIP) Plan, included approximately 2,000 acres in the Town of Conquest. This was based on preliminary estimates of where Project Components could be located due to known constraints at that time. The targeted area was in proximity to the Project's proposed POI (the NYPA Clay to Pannell 345-kV transmission line). During refinement, the Applicant continued public outreach and discussions with landowners and Town officials; promoted open communication through virtual public open house style meetings and attendance at Town Board meetings; and conducted environmental studies and analyses to determine which areas to avoid disturbance to protect those resources within the Project Area. During siting efforts, the Applicant acquired an additional 693 acres to increase the amount of land that could be used

for the Project in order to further avoid lands with steep slopes and wetland areas and also to provide additional setbacks from adjoining landowner residences and property lines. This resulted in a final Project Area of 2,288.7 acres. The estimated LOD is 1,199.8 acres and the estimated fenced in area is 1,053.7 acres. Graphic 9-1 depicts the initial Project Area (left) as depicted in the March 2020 PIP Plan versus the final Project Area (right) being represented in this Application Filing.



Graphic 9-1: Initial Project Area vs. Final Project Area

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 2,288.7-acre Project Area considered existing environmental constraints, previously disturbed areas from agricultural activities, public health and safety concerns (setbacks and exclusion areas), engineering constraints in the area (e.g., wetlands, slopes, and geography), and expressed landowner preferences, as well as a number of other variables as described within the supporting exhibits of this Application. Additionally, community feedback was strongly considered in site design development.

One of the primary considerations in development of the Proposed Layout for the Project was to avoid or minimize impacts to state-mapped wetlands and their 100-foot adjacent areas. Where

impacts to state-mapped wetlands are required due to development constraints within the Project Area, lower value wetland areas were prioritized over higher value wetlands for impacts. Additionally, several areas of large, contiguous forested wetlands were avoided during development of the Proposed Layout. Exhibit 22 contains further information regarding impacts and state-mapped wetlands in the vicinity of the Project Area.

A large portion of the Project Area has previously been used for 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 development of areas that would require extensive earthwork and grading to the extent practicable. Areas of steep slopes that would require significant earthwork have been avoided so the site is nearly balanced for cut and fill.

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. Because the Project Area consists primarily of previously disturbed 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 0.3 percent (1,053.7 acres) of all lands designated as mapped Agricultural Districts within Cayuga County (CAYU005). Within the Project Area, the LOD (1,180.2 Acres) includes approximately 21.2 percent (of Project Area) of land (485.6 acres) classified as Prime Farmland, 2.6 percent (60.5 acres) as Prime Farmland if Drained, 14.5 percent (331.6 acres) as Farmland of Statewide Importance, and 13.2 percent (302.5 acres) as Not Prime Farmland. However, only 12.2 acres of permanent impacts are proposed to Prime Farmland. Overall, of the 817.3 acres that will occur on land classified as Prime Farmland and Farmland of Statewide importance, only 20.4 acres (<0.0066 percent of Prime Farmland and Farmland of Statewide Importance within Cayuga County) of permanent soil disturbance is proposed with the remaining 796.90 acres consisting of temporary soil disturbances that will be restored following construction. Further information on existing agricultural uses at the Project Area is provided in Exhibit 4. The continued use of these parcels as agricultural outside of the LOD 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 LOD. Regardless, the Project will not disrupt current and future agricultural operations by the landowners on parcels outside of the Project Area.

Once the 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” comprised of a fixed-tilt (fixed) system. However, sun-tracking panel racking (tracker) panels may also be used instead of a fixed system within a similar LOD.

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 through 4. Soil mineral groups 1 through 4 are considered by the New York State Department of Agriculture and Markets (NYSAGM) 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 through 10 are considered to be less valuable and have limitations for agricultural production (Mulford 2020).

Within the LOD (1,199.8 acres), approximately 529.5 acres (44.1 percent) of soil are classified as being within mineral soil groups 1 through 4 and 670.1 acres (55.9 percent) of soil are classified as being within soil groups 5 through 10. Of the 529.5 acres of soil within the LOD that are classified in mineral soil groups 1 through 4, only 2.8 percent (14.7 acres) will be permanently impacted by the installation of Project Components. This is less than 10 percent of the soils within the Project Area classified as mineral soil groups 1 through 4, a percentage goal employed by NYSAGM.

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

The Applicant also evaluated the following considerations:

- i. Consideration of alternative parcel sites within the Project Area, designs, or arrangements that would avoid or minimize impacts to wildlife and wildlife habitat, to the

maximum extent practicable, including but not limited to habitat fragmentation, disturbance and loss, and the displacement of wildlife from preferred habitat: The Project Area consists primarily of active agricultural land and forested land. Additionally, several palustrine forested and emergent wetland complexes exist within the Project Area.

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 areas and areas utilized for agricultural purposes. Panel placement on areas of steep slopes has been avoided to reduce the amount of earthwork and associated grading impacts required for Project construction. Areas of contiguous forested wetlands have been avoided to the maximum extent practicable, which will minimize fragmentation of remaining forested areas and minimize impacts to existing interior forest communities. For example, impacts to parcels 56.00-1-8, 56.00-1-9, 56.00-1-39, and portions of parcels 56.00-1-19, 56.00-1-48.2, 62.00-1-9.21, and 63.00-1-6.1 were avoided to minimize impacts to interior forest communities and forested wetlands. Impacts were minimized to parcels 63.00-1-6.1, 63.00-1-6.1, 56.00-1-19, 56.00-1-14.111, and 50.00-1-36 to minimize impacts to steeper slopes. Of the entire 2,288.7-acre Project Area, only approximately 2.6 acres of wildlife habitat will be permanently lost due to the placement of Project Components, which would be 0.2 percent of the LOD. Approximately 253.4 acres of forested area will be converted to grassland and arrays for the life of the Project. The majority of wildlife habitat to be permanently lost currently exists in agricultural areas. Some of these areas provide limited perpetual wildlife habitat due to the regular disturbances and anthropogenic pressures of active farming practices (Exhibit 22, Section 22(f)(4)).

- ii. Arrangements that would avoid or minimize impacts to waterbodies, wetlands, and streams, to the maximum extent practicable: Impacts to wetlands have been avoided to the maximum extent practicable by siting Project Components within upland (typically agricultural) areas wherever possible and pursuant to the Siting Board's Atlantic Wind decision, and applying the BMPs in Appendix 22-6. However, due to the amount of land within the Project Area occupied by wetland, impacts to these features are, in places, unavoidable. Where wetland impacts could not be avoided, impacts are minimized through project design and the application of BMPs including stormwater prevention control measures, equipment restrictions, and the use of existing access roads and

crossings. Of the 66 wetlands on the Project Area and LOD, 16 wetlands are subject to permanent impacts consisting of 11,370 sq. ft., or 0.26 acres of the 2,288.7-acre Project Area for USACE jurisdictional and non-jurisdictional wetlands, 4,284 sq. ft., or 0.10 acres for assumed NYSDEC-regulated wetlands, and 42,153 sq. ft., or 0.97 acres for assumed NYSDEC-jurisdictional wetland adjacent areas. In addition, construction of the Project is anticipated to result in approximately 15,462 linear feet of temporary disturbance and 275 linear feet of permanent disturbance to NYSDEC Class C and unclassified waterbodies identified during on-site wetland and stream delineation. These wetlands are described further in Exhibit 22, Exhibit 23, 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, some presently mapped and regulated 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 their 100 foot adjacent areas to the extent practicable, and by proposing Horizontal Directional Drilling (HDD) to prevent disturbance that would have otherwise been unavoidable with surface activities.

Although the construction of the Project will result in temporary and some permanent impacts to NYSDEC-mapped wetlands, waterbodies, and their regulated 100 foot adjacent areas, these impacts were minimized to the extent practicable. Where wetland impacts are required in order to place enough modules to achieve the contracted 200-MW generating capacity, the Project was carefully designed to focus those impacts on lower value wetlands. Exhibit 22 includes a detailed discussion of the impacts to wetlands. In addition, as previously mentioned, during siting efforts, the Applicant acquired an additional 693 acres to increase the amount of non-wetland developable land that could be used for the Project. The proposed panel locations were chosen based on balancing New York State's energy goals and the 200 MW required under the Applicant's REC contract with the amount of land available for the Project, Project constructability, environmental impact, public health and safety, and all of the other factors addressed within this Application.

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 Control (SPC) Plan.

- iii. Arrangement of inverters and energy storage components away from property lines: The Project has been sited approximately 73 feet away from the nearest non-participating residential property line, and approximately 202 feet from the nearest non-participating occupied residence. In most cases, the Project has been sited several hundred feet away from other non-participating residences, to limit impact. In addition to this, the commitment of setting back Project Components a minimum of 250 feet from residences, both the Proposed Layout sites inverters and energy storage systems away from Project Area boundaries to the maximum extent practicable. The majority of inverters and energy storage systems for the Project will be centrally located within the arrays and away from Project boundaries. Access roads to the inverters and energy storage systems have been sited to maximize accessibility by providing access to multiple array and inverter locations where practicable.

- iv. Consideration of alternative perimeter fencing designs that would minimize, to the maximum extent practicable, contrasts with adjacent land uses and visual character: Fencing is proposed as close as feasible to the solar arrays and energy storage components, while still allowing access for maintenance and emergency services. Barbed wire is not proposed on the perimeter fencing of the solar arrays and will only be used at the Project POI Facilities that are located within the interior of the Project Area. Alternative perimeter fencing designs were considered, such as the proposed vegetative screening. However, the fencing for the Proposed Layout was selected due to 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 in Appendix 11-2. Energy storage systems have been sited away from residences. Design refinements to focus on the placement of energy storage facilities have resulted in no energy storage facility being within 684 feet of a home.

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 250 feet from non-participating residences, thereby providing significant setbacks from adjacent landowner's residences that exceed setbacks required by the Town of Conquest.

- v. Alternative design and arrangement options for accommodating existing or planned alternative agricultural production projects: Active agriculture exists on 1251.4 of the 2,288.7 acres in the Project Area. Approximately 913.8 acres of existing agriculture are located within the buildable area (Preliminary Design Drawings, Appendix 11-1). 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. Additionally, land located outside of the Project fence line will remain available for the landowner to utilize for agricultural purposes, should they choose to do so.

(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 fixed solar racking technology, with an alternate design using tracker racking technology. The Proposed Layout (Appendix 11-1) depicts a fixed design which represents the most likely racking design to be used during construction. A final racking technology decision will be made and detailed in the Compliance Filing. The fixed racking systems to be used would be similar to the Gamechange Solar MaxSpan Pile Driven System, 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. A specification sheet for the energy storage system has been included in Appendix 2-4. Only selected elements of the Project would change based upon the array racking system types used, but all changes would be generally within the Project Component LOD and to the same land uses shown in the Proposed Layout. Accordingly, there would be no new or significant adverse impacts from selecting either the fixed or tracker racking system. The location of interior access roads and inverters, depending upon the final locations, could differ from that shown in the Proposed Layout (Exhibit 11-1). Land coverage ratios will also be adjusted but they are not expected to be

substantial or significant as land uses would not change in these locations between Application filing and finalization of the Compliance Filings. Accordingly, the drawings, plan and maps provided in Exhibit 11 depict a layout with only fixed array systems.

It should be noted that the proposed height of the fixed racking system and solar module (11-foot maximum) are based upon products that are currently commercially available. It is possible that additional products will 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 fixed racking system in order to provide adequate ground clearance. 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 specifications above and presented as appendices to Exhibit 2 with a maximum height of 11 feet, with the exception of the viewshed analysis which conservatively assumes an 18-foot maximum height (refer to Exhibit 24).

(3) Scale or Magnitude

The scale and magnitude of the Project is limited to the development of a 200-MW solar Project with 20MW/4-hr energy storage, consistent with the Applicant's contract with NYSERDA to sell RECs. This capacity was studied and approved by the New York Independent System Operator (NYISO) for interconnection into the bulk transmission system. Generally, approximately 5-10 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 electric system.

The Project's proposed in-service date is no later than December 2023. This date is required through the Applicant's REC contract with NYSERDA. As documented in the SRIS provided as Appendix 5-1, the 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 or 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 comply with and exceed the local setbacks that the municipality has approved for its residents. Glare to roadways and residences has been minimized to the maximum extent practicable, as discussed in Exhibits 15 and 24. The solar arrays are also proposed on land leased from owners of private property. Therefore, public access to the Project is limited and thus 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 local school districts, through tax payments, or payments in lieu of taxes (PILOT), will allow for the creation of better facilities and opportunities for students where needed. The contributions to the County and Town can be used to improve roads, infrastructure, recreational facilities, and emergency services in the area. Additionally, there will be positive short-term economic impacts during construction as explained in Exhibit 27. These positive short-term economic impacts during operation will come from the creation of temporary and permanent jobs, including Project employees, outside mowing, and snow removal services over 30 years. In addition, workers coming to the Town of Conquest and the greater Cayuga County area for the Project will likely spend money at local businesses for fuel and/or dining.

Solar project payments to landowners through leases will help stabilize revenues for local participating farmers (as crop and dairy prices often fluctuate from year to year and are particularly

volatile in the current economic condition). Payments paid to landowners are typically reinvested in the community, helping to create jobs and improve the local economy.

The Proposed Layout discussed in Section 3(c) assumes that the Project would remain a 200-MW Project. If the Project size was reduced, energy production would decrease, which would not provide the emission reductions that a 200-MW project would create. Economic benefits, discussed above, would also be reduced.

9(e) Why the Project Design, Technology, Scale or Magnitude, 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 and energy storage systems 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 waterbody 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 by exceeding the setbacks required by the Town of Conquest. 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 200-MW Project with 20 MW/4-hour energy storage is limited to installation of panels and energy storage components within the 1,053.7-acre fenced area of the 2,288.7-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 approximately 200 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 agricultural, with some residential, vacant, forested and community services land uses and that the Project is not built. Under this scenario, nothing immediately changes versus current conditions and current uses (primarily agricultural and forested) 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 increased tax, or PILOT payments, which could have a tremendously positive impact on the community and local economy while diversifying their revenue streams. The increased tax, or 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 250 local jobs (peak) in construction trades and 3 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 Cayuga County stores. Furthermore, a No Action Alternative would not deliver the Host Community benefits to the local economy, assuming that the Applicant can 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 CLCPA, 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 NYSERDA contract, the Garnet 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. Two snowmobile trails traverse the northern half of the proposed Project Area. Although the LOD will be surrounded by fencing, the trails within the NYPA ROW can remain. The Applicant recognizes the recreational importance of the snowmobile trail that passes through the Town of Conquest, including through the Project Area. The Applicant will coordinate with the snowmobile clubs and participating landowners to continue to provide snowmobile access through the Project Area. Other recreational uses are limited only to those allowed by the private landowners. Therefore, the impact to recreational uses is minimal. The No Action Alternative would therefore not significantly improve recreational opportunities within 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 NYSERDA'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 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 reasonable or viable alternatives. 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 and energy storage), 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 during the development and engineering process to avoid and minimize significant adverse 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 setbacks to minimize impacts potentially affecting environmental, aesthetic, and agricultural resources, 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

Where development is proposed, the Project Area consists primarily of agricultural and forested land. Solar panels have been proposed in areas already disturbed by agriculture 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. 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. 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 its pre-construction conditions.

In order to further minimize impacts to vegetative communities, the siting of Project components focused on avoiding unnecessary impacts to grasslands, forests, wetlands, and shrublands. As a result, permanent impacts to these landscape features (and vegetation communities) are only proposed in areas designated for permanent operation of the Project (Exhibit 22, Section 22(b)). Additionally, although the Proposed Layout requires 260.3 acres of tree clearing, the Applicant has proposed 12.7 acres of trees and shrubs to serve as visual mitigation in select areas.

References

East Point Energy- DAM's Direct Testimony of Jason Mulford. Taken on June 5, 2020, at pg. 7, lines 6-18. Available at: http://documents.dps.ny.gov/public/MatterManagement/CaseMaster.aspx?MatterSeq=54553&_sm_au_=iVV46j6P3jMBn0Dj. Accessed May 2021.