

## **Project Narrative**

The applicant is Starks Holdings, LLC, whose sole member is Lyndel J. Wishcamper. Mr. Wishcamper and his companies have developed over 15,000 affordable units across the country and has partnered with apartments and governments in four states to develop solar arrays. The applicant will be the long-term owner of the project. Additionally, the applicant has partnered with ReVision Energy Inc. (ReVision), as a project development partner and the eventual construction contractor. ReVision is a vertically integrated solar development, construction, and maintenance company that has been in business in Maine for more than 15 years. ReVision has constructed more than 7,000 solar projects across northern New England and has a strong track record with projects of this scale.

The location of the proposed solar project is 486 Anson Rd., Starks, Maine (property tax map R-10, lot 2.2), a 47-acre parcel presently owned by David Shaw and Pamela Flag-Shaw. The applicant executed a Purchase & Sale Agreement with the landowners with the intention of acquiring title to the property in July 2020.

The array would be in an area south of Anson Rd. that is presently a mix of open field, shrubland, and early-growth forest. While the property was once predominantly used for farming, the bulk of the area has since been left fallow and has grown back with shrubs and trees. Some of the property is still utilized as a hayfield, but the solar project would not significantly overlap this area. We understand that Starks values the importance of maintaining farmland and open space and we believe that this project is well-aligned with the town's long-term plan; the array will involve the clearing and stumping of old farmland that has since been re-vegetated. Moreover, the construction of the array will neither disturb the topsoil nor cause environmental harm to the soil. In other words, at the end of the solar array's useful life (40+ years), it would be entirely possible to convert the land back to farmland.

The solar project would be a 2.59 MW DC, 1.8 MW AC (11.14 acres) array, capable of producing 3.1 million kWh annually (enough electricity to serve approx. 375 households, for reference). The primary components of a ground mounted solar array are steel I-beams driven into the earth to serve as foundations, aluminum racking fastened to the I-beams, and solar panels affixed to the racking. The rows of panels would be oriented due south, sloping 35 degrees (away from Anson Rd.). At their peak, the panels would stand approximately 12 ft above grade. The rows of panels would be electrically connected via underground conduit and wire. Inverters would be positioned on the backside of the racking, and a concrete pad-mounted transformer and switchgear would be located within the array. A small amount of utility infrastructure would be required to connect the project to the local grid – several poles, a meter, and protective equipment. In order to provide security and safety (in compliance with the NEC), a 7-ft chain-link fence would be constructed around the array. Lastly, a gravel drive to provide construction access and a staging/unloading area would be extended from the existing driveway.

The applicant is the planned long-term owner of both the array but understands that it is vital to the town to have a plan in place to remove the array once it has lived its useful life, which is expected to be approximately 35 years. To alleviate the risk of abandonment the applicant agrees to acquire a letter of credit in the name of the Town of Starks in the amount of \$54,046, renewable annually until the array is removed from the site.

Since the *Site Inventory & Analysis* component was submitted to the Town of Starks, the project has been downsized approximately 25% from an electrical nameplate (and physical footprint) perspective. This downsizing was driven by the significant cost of utility upgrades required for a larger system.

Construction is expected to begin as early as fall 2020, with the anticipated completion date of the project no later than fall 2021. To begin construction, the site will be cleared of the existing trees and vegetation. A portion of this woody material will be chipped and used for the perimeter stormwater and erosion & sedimentation controls (bark/mulch berm). The remainder of the smaller biomass will be left on site for decomposition, while the larger trunks and waste timber will be transported off-site to adequate regional waste/recycling/composting facilities. Additionally, waste material will be generated during the construction process (e.g. packaging from the solar panels) – this will be aggregated on-site in a dumpster and transported off-site via a private service. The primary system components (panels, inverters, metal racking) may be staged on the site in advance of the construction start for 30-90 days. To the extent possible, the existing barn will be utilized for this material storage. Otherwise, the equipment will be kept for this short duration in an open/flat/dry portion of the site. At the completion of the construction process, nearly the entire site (with exception of the transformer pad, post locations, and gravel driveway) will be re-vegetated with a low-growth grass mix. No additional planting is proposed or expected – the site is ~400' from the nearest residence and natural buffering already exists. The panels stand no taller than 12' above grade, so the visual impact is less than that of a standard, single-story building. Because the panels face south, no glare will be directed towards the road; in fact, due to the existing tree line and topography, the array will hardly be visible from passing traffic on Anson Rd.

The only period of noteworthy traffic to the site will be during the approx. 6-month construction period. On the front end, larger equipment and vehicles will be required for road construction, site clearing, I-beam installation, and primary-component delivery. We expect 5-15 vehicles on-site for the first 3-4 months of construction. During the final 1-2 months, which involve the electrical wiring, project close-out, and commissioning processes, the traffic will be lower. The existing gravel road will be improved/widened to allow for the larger vehicles, and plenty of parking area will exist on site (on the shoulder of the gravel access road system) for the anticipated level of traffic. Once the project reaches operations, it will remain in service for 25-40+ years. During this period, the project will have an expected 2-6 visits annually (a mix of vegetation management, and reactive and proactive electrical/mechanical maintenance). Once the project reaches the end of its useful life, either (1) the project will be decommissioned, and the site will be

re-stored to its prior state, or (2) the project will be “re-powered” with the replacement of the primary components, and it will remain in operation for another 25-40+ years.

With respect to permits required for the project, we anticipate acquiring the following state and federal permits:

- Maine Department of Environmental Protection Stormwater Permit-by-Rule
- Maine Department of Environmental Protection Natural Resource Protection Act (NRPA) Permit
- Maine Department of Transportation Driveway Permit
- Army Core of Engineers General Notice Permit

We anticipate having received all these permits by fall 2020, so would expect to have evidence of acquisition of the relevant permits added as conditions of approval from the Town of Starks before a building permit may be obtained.

Energy generated from the solar array would be sold to an in-state entity (public non-profit, private non-profit, or business) under a long-term (20+ year) agreement to help offset the entity’s electric costs. The project would participate in Maine’s Net Energy Billing program, which provides an exciting opportunity for the development of new solar projects to offer low-cost energy to local electric end-users.

From a municipal services standpoint, the project will create virtually no additional burden on the Town of Starks; it will not require any water, sewer, or waste disposal. Additionally, fire and safety services are not anticipated – a 7’ safety fence will encircle the project, and the array is constructed from non-flammable materials. Lastly, the project will add the municipal tax base and yield additional, annual tax revenue to the town.

Finally, solar photovoltaic equipment is durable, built to withstand New England’s harsh wind, rain, and snow. The steel beam foundations are customized to the substrate (we perform on-site geotechnical tests as part of the design process), and the aluminum racking specifications take into consideration the region’s snow and wind loading requirements. This is all to say that, when installed properly, solar arrays are expected to last 40+ years and provide low-cost energy with minimal ongoing operational and maintenance support. From a visual standpoint, the bulk of the glare produced is directed upwards, and the equipment generates virtually no noise while generating electricity. Given the minimally-intrusive characteristics of solar photovoltaic arrays, and the larger environmental benefits solar provides, we hope this project will be a welcome addition to Starks’s rural landscape.