



Seaboard Solar  
143 West Street  
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April 12, 2021

Jeremy Cramer  
Building Inspector  
Town of New Scotland – Building Department  
2029 New Scotland  
Slingerlands, NY 12159

**RE: Solar feasibility/viability for the Town of New Scotland, New York**

To whom it may concern,

The intent of this letter is to provide the Town of New Scotland with a brief overview of solar viability within the town based on present interconnection conditions as of early February 2021. The Town of New Scotland’s electrical needs are provided by substations and distribution lines owned and operated by National Grid. Solar arrays provide a clean alternate source of energy to this electrical service system that is produced at the project location and consumed in its vicinity. Therefore, a solar project built within the town will service the businesses and citizens of the Town of New Scotland. These projects are limited by their proximity to substations and distribution lines and due to the low feasibility of locating any project within the Town of New Scotland near the distribution lines derived from substations located outside of the town’s borders, this analysis will focus on two substations located in the Town of New Scotland and their distribution lines that comprise the vast majority of New Scotland’s electrical infrastructure.

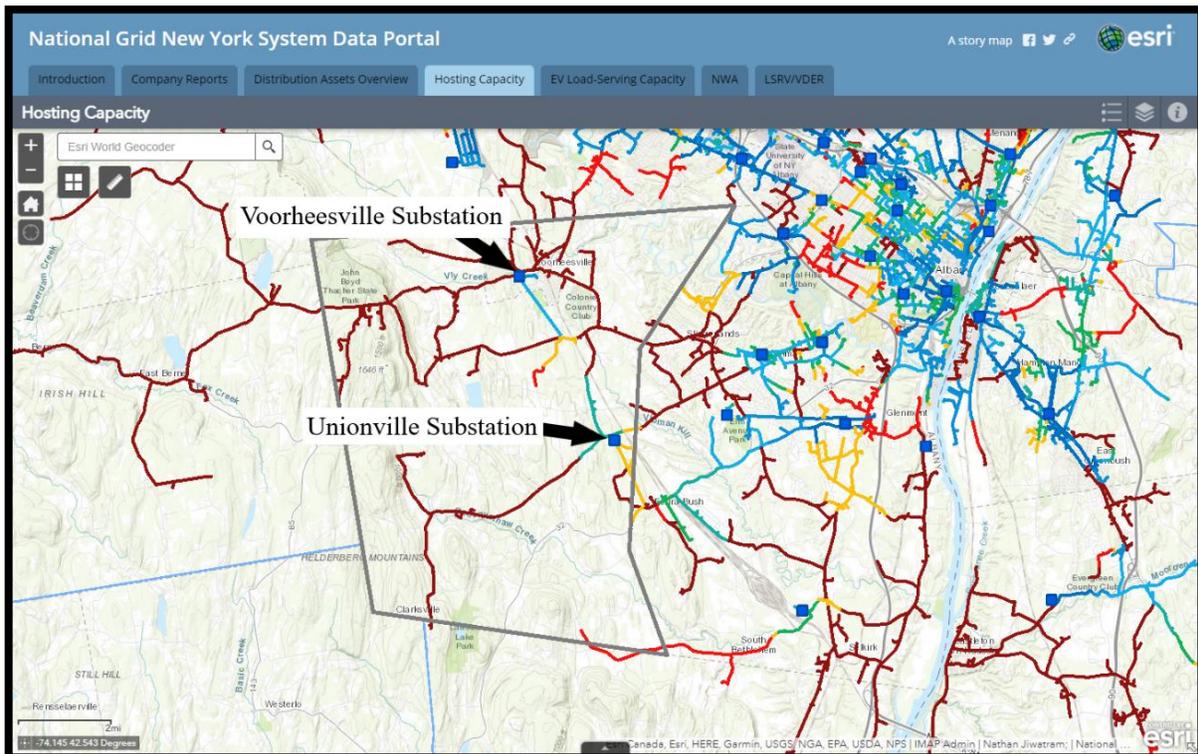


Figure 1 National Grid’s Electricity Infrastructure located in the Town of New Scotland. The majority of electricity infrastructure that services the town is derived from Voorheesville and Unionville Substations.

For all New York State utility companies, including National Grid, the governing factor that limits the amount of distributed energy resources (DER), including solar and wind energy systems are set by the thermal capacity rating (MVA) of the substation transformer. On top of this, each individual distribution line (Voorheesville has 3 separate lines) is limited to a maximum of 10 MW of distributed energy resources, including wind and solar energy.

Figure 2 shows the Voorheesville Substation and its distribution lines and includes the substation data that indicates the Thermal Capacity rating to be 25.99 MVA. The total energy resources connected or planned for connection is currently 21.35 MW (Substation/Bank Total DG), which severely limits additional distributed energy resources from connecting. Furthermore, the color of the distribution lines indicates that a majority of them are saturated leaving few remaining areas conducive to interconnecting any energy resource. By viewing this data, we are able to conclude that it would be extremely difficult to add additional distributed energy resources, which include solar or wind, to the Voorheesville substation.

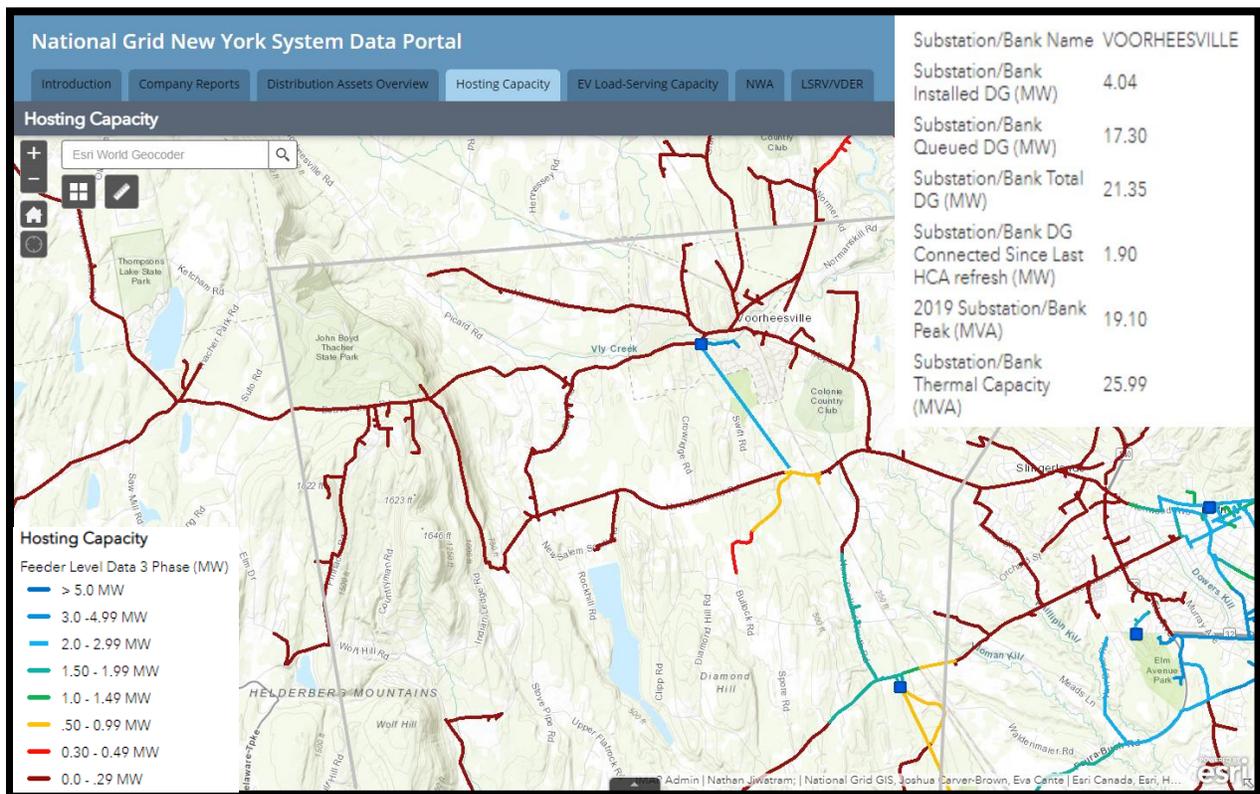
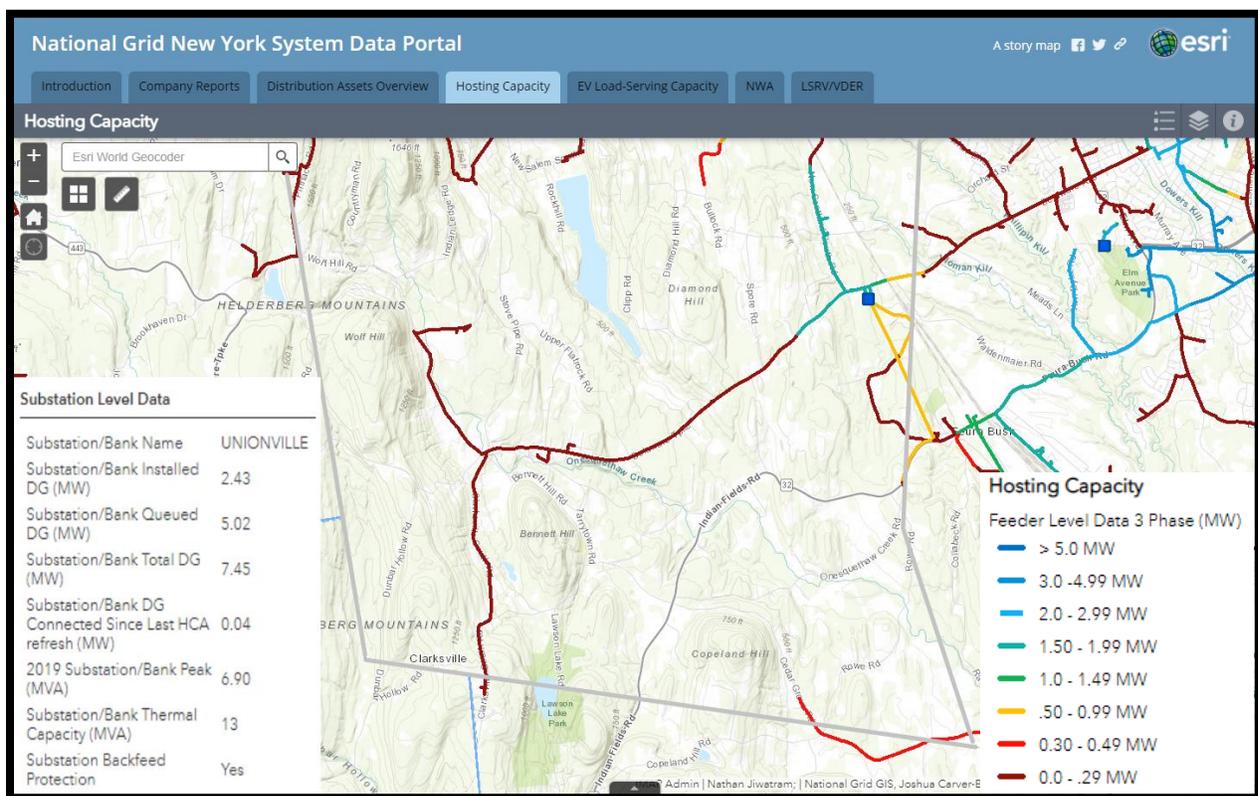


Figure 2 Voorheesville Substation and distribution lines covering northern New Scotland.

The same analysis that was done for the Voorheesville substation was also performed on the Unionville substation. *Figure 3* shows the Unionville Substation and its distribution lines and includes the substation data that shows the Thermal Capacity Rating to be 13 MVA. The total energy resources connected or planned for connection is currently 7.45 MW (Substation/Bank Total DG), which limits additional distributed energy resources from connecting. In addition to this, the majority of distribution lines within the town of New Scotland are red, indicating saturation, and the remaining capacity on this substation would most likely be filled in neighboring towns due to the greater number of less saturated distribution lines outside of New Scotland. By viewing this data, we are able to conclude that it would be difficult to add additional distributed energy resources located within the Town of New Scotland to the Unionville Substation.



*Figure 3* Unionville Substation and distribution lines covering southern New Scotland.

Seaboard Solar is able to continue its project within the Town of New Scotland due to its proximity to a rare and separate utility line. As originally planned, the Bullock Road Solar Project would not have been feasible due to the distribution line and substation oversaturations as indicated in Seaboard Solar’s preliminary-application results with National Grid, and based on the information provided above. It was during a preliminary-application results meeting with National Grid where this project was discovered to be suitable for a non-distribution line that abuts the property and runs from the Voorheesville to Bethlehem substations as shown in *Figure 4*. Based on the greater standards and requirements needed to connect Distributed Energy Resources such as wind and solar to these lines, and based on the limited feasible locations in New Scotland where a project could be located in close proximity to this line, we believe that the Bullock Road Solar project proposal will be the only project of its kind possible within the Town of New Scotland.

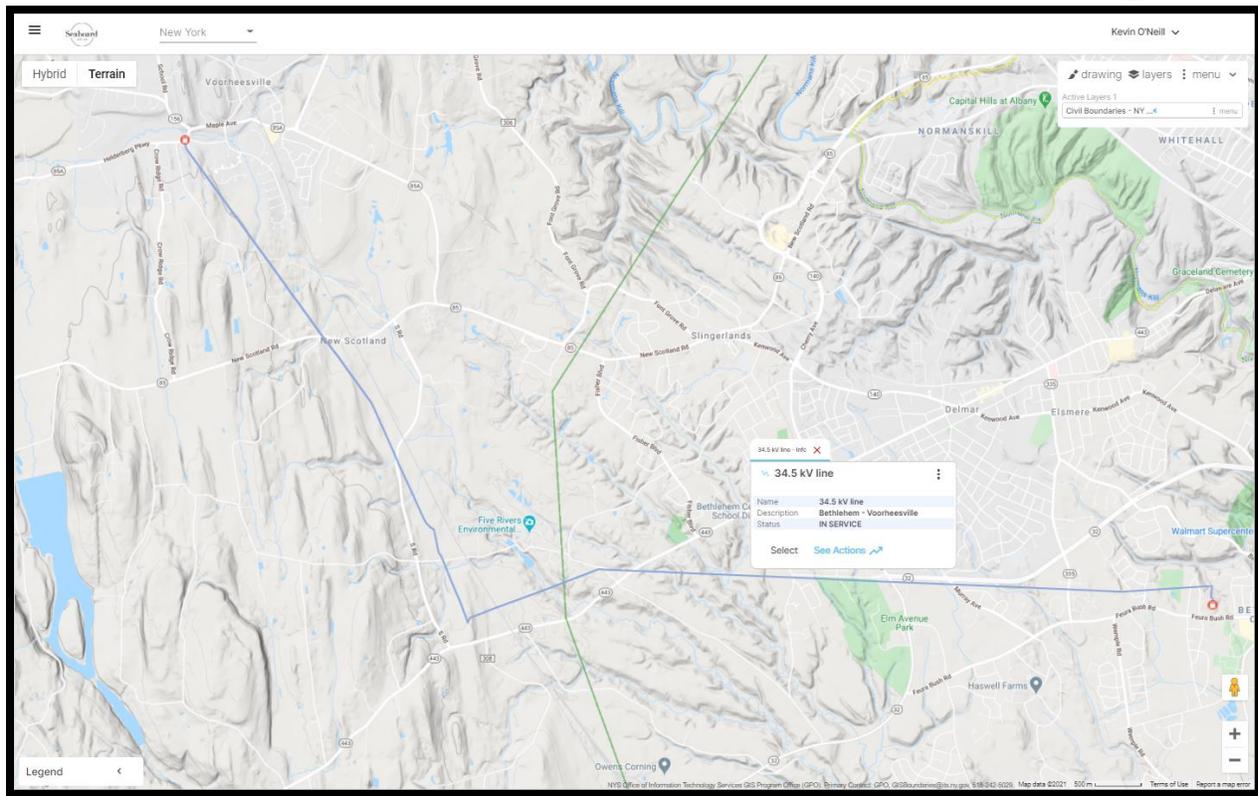


Figure 4 National Grid non-distribution line running from Voorheesville Substation to Bethlehem Substation.

Considering the aforementioned limitations in adding new Distributed Energy Resources such as wind and solar to the existing energy infrastructure within the Town of New Scotland, and the additional factors required to site a solar project, Seaboard Solar believes the Bullock Road Solar Project is one of the last possible alternative energy projects able to be located within the Town of New Scotland.

Please note, all information and images provided in this memo are able to be viewed publicly by visit the links listed below.

[National Grid New York System Data Portal \(esri.com\)](https://www.esri.com/nys/)

[State of New York - Utility Interconnection Queue Data](#)

If you have any additional questions or concerns, please do not hesitate to contact me at (860)717-2104 or [koneill@seboardsolar.com](mailto:koneill@seboardsolar.com)

Sincerely,

Kevin O'Neill  
 Manager  
 Seaboard Solar Holdings LLC