

Technical Assistance Request

Project: Storm Resilient Essential Grid Services from Quest Renewables

Development of the Quick-Deploy Storm-Resilient Solar PV Array will be greatly enhanced and accelerated through resources within the American Made Solar Prize and NREL network(s). Our most immediate tasks at hand are to refine the cost of the system and determine specific component sizes to resist 180 mph sustained winds. We need to research system cost, determine specific connection requirements, and investigate failures of PV systems in high-wind scenarios.

To accomplish this, we are looking to utilize the AMSP network in the following ways:

- Gain access to solar industry data to help us determine pricing;
- Connect with advanced industry professionals in the Energy Analysis, Advanced Manufacturing, Grid Modernization, Solar, Water, and Wind Research areas within the NREL network;
- More specifically, connect with hurricane-specific wind specialists, or solar-specific wind testing specialists who can help us develop a greater understanding of failures of PV systems in high-wind scenarios (and successes of PV systems in high-wind scenarios);
- Make introductions to potential regional partners, connectors, customers, or government entities in coastal regions.

After the Set! Demo Day, we will be developing an initial production prototype (including structural testing of components in a wind testing facility), securing strategic partners, and deploying our prototype in the field.

To accomplish these tasks, we are looking to utilize the AMSP/NREL networks in the following ways:

- Access a structural wind testing facility or chamber;
- Make introductions with one or more potential field-testing partners.