

American Made Solar Prize Round 4 - Technical Assistance Request

Direct funding, vouchers, and technical assistance from the American-Made Solar Prize will provide valuable resources to help Meltek cross the pre-commercial gap. Meltek is currently receiving support from the New York State Energy Research and Development Authority (NYSERDA) through the NYSEDA Entrepreneur-in-Residence program and has been approved to participate in the NYSEDA Clean Energy Internship Program and NYSEDA On-the-Job Training Program. In addition, Meltek is an Associate Member of Nextcorps, an incubator in Rochester, NY, and will be eligible for an Ignition Grant through Rochester Gas & Electric for \$25,000 in November 2020. Meltek is currently leveraging limited funding through personal funds and intends to seek additional investment via friends and family, but the American-Made Prize resources will assure our path to commercialization.

The following are topic areas that would be critically helpful in developing our software platform, testing it, and creating a product out of it that will drive commercialization.

1. **Government Data** - We would like to leverage government data on past cybersecurity threats and intrusion. Utility infrastructure is closely monitored as critical infrastructure in the United States, and we need robust datasets on past intrusion activity to train and test our models.
2. **Government Labs** – While we are building a hardware lab to generate and collect initial data, national laboratories include Oak Ridge National Laboratory and National Renewable Energy Laboratory can provide robust hardware systems including advanced microgrid controllers on which we need to test and refine our models. In addition, we would highly benefit from the expert assistance they could provide based on their prior research.
3. **Investments** – We will require further investment including grants for development of the technology and long-term commercialization, and we would significantly benefit from the American Made Connectors’ assistance with seeking that funding.
4. **Partner Network** – While we are currently conducting market research and customer discovery, we will need help from the American Made Partner Network to secure partnership agreements to test our software in real-world applications as well as in going to market. We are currently working on securing partnerships with solar panel installers and device manufacturers but have had limited discussions.
5. **Business Model** – Our software product will have broad implications both in commercial and residential applications. As distributed energy resources continue to permeate through residential applications, utility grade tools like ours would be highly beneficial for consumers in

addition to commercial customers, but these different customer segments require different go-to-market strategies. We would highly benefit from engaging market participants who could help us better understand the technical requirements for each customer segment.

6. **Product Development** – We need assistance in productizing our software in a manner that maximizes user acceptance. Through general customer discovery that we have already conducted, we understand our product needs to be easy-to-use and understandable for broad user acceptance, but we require further product research to refine the product requirements for our go-to-market strategy.