

Technical Assistance Request

While the Luminous team has been uniquely built to support our technical development for the project, we understand that additional technical assistance can further help not only accelerate but reduce risk in our project. As such a number of key items are as follows,

1. HARDWARE FABRICATION. The POC will leverage a number of common off the shelf equipment, however our system still requires several custom components to be fabricated and thoroughly tested for the success of the POC.
 - a. End of arm tooling (EOAT). The interface attaching to the end of the robot arm responsible for picking up the solar modules via vacuum will need to be custom designed and fabricated. We have already designed an initial prototype in house and could leverage the members of the American-Made Network to help realize the design. As a Greentown Labs member, FORGE can help with rapid prototyping of these physical designs.
 - b. Additional robot panels. In order for safe operations outdoors, a number of panels will need to be fabricated to act as protection against moisture, dirt, rain, and various outside elements. Assistance in the fabrication of these additional panels can also be done through American-Made Network members FORGE and various fabrication labs associated with the network.
2. FIELD TEST. Partnering with early adopters in the American-Made Network will enable us to perform rapid iterations during robot development and perform field tests of the system in canonical deployment settings.
 - a. Equipment logistics. Acquiring pallet and racking/tracker system at the Luminous facility to conduct development and testing procedures that mimic the infrastructure found onsite.
 - b. Operator interactions. Iteratively learning how human operators interact with our system and incorporate their feedback into our system. We find that co-development with the end user to be extremely important for the success of the resulting product to ensure that it fulfills the needs and requirements of the operator in the field.