TECHNICAL ASSISTANCE REQUEST (2 pages, including images, will be made public)

Provide a two-page description of the unique challenges and needs a national lab, private facility, and/or member of the American-Made Network could potentially help you resolve. The Prize Administrator will make this request broadly available so members of the American-Made Network can understand your needs and assist you through the voucher program or otherwise.

Through the competition we will have two keys challenges that a member of the American-Made Network could help with. The most important challenge that we will encounter is to compare the performance of our GaAs products with current industrial GaAs cells. In order to successfully track the development of our technology we would need an official entity that could provide cell efficiency certifications. Moreover, to transition this technology into industrialization, we need official certifications as quality evidence of our products to present to potential investors and costumers.

The best entity to perform these certifications is the National Renewable Energy Laboratory (NREL). This center is arguably the best center for efficiency certifications worldwide. Therefore, collaborating with NREL for the advancement of our technology would help us understand the quality of our products throughout the competition.

The other main issue we might encounter is using a Silicon processing line for our GaAs wafers. This processing line must be capable of effectively fabricating record heterojunction cells. Arizona State University hosts a pilot line with such processing capabilities. Assistance through the voucher program with associated fees for processing time and labor could be of great help to successfully process multiple batches of our GaAs cell.