## **TECHNICAL ASSISTANCE REQUEST**

AeroShield's (<u>www.aeroshield.tech</u>) team and collaborators have expertise in producing and scaling ultraclear, superinsulating aerogels (Image 1) and have demonstrated the ability of this material to improve the efficiency of a variety of solar thermal receivers, including non-concentrated flat plate collectors as well as concentrated systems such as linear Fresnel collectors (Image 2). However, the team has limited experience with building large scale systems and solar desalination. During the teaming phase we have spoken to fellow competitors Trident Desalination and Winston Cone Optics about the potential to partner and leverage the expertise of all teams. In the design phase we will need support in the permitting and installation of a desalination system at a test site.

Additional resources to assist in the design and testing of our collector concepts, as well as resources to help down select target desalination technologies would help accelerate design choices and overall progress during the design phase.



Image 1: (Left) AeroShield's ultra-clear and super-insulating aerogel. (Right) AeroShield's aerogel scaled to 2 sqft sheets while maintaining clarity and thermal conductivity of lab scale samples.



Image 2: (Left) 6 sqft aerogel insulated flat plate collector demonstration. (Right) 19.6 m<sup>2</sup> aerogel-insulated linear Fresnel demonstration.