

Project: Rocking Solar Technical Assistance Request: Company: Rocking Solar (Parent Company - KemHi LLC) Contact: Darin Palmer, 859-916-9270, darinp@kemhi.com

Rocking Solar tracking solution is ideal for low slow rooftop non-residential applications increasing the efficiency over current fixed systems by ~30%, reducing the weight by 50%, with improved flexibility for various building requirements. This gives a 10 to 20% improvement in LCOE compared to current flat rooftop solar solutions. We are confident in that are overall rocker design will benefit from utility scale tracker parts and economies of scale while meeting commercial building requirements.

Technical Requirement in Order of Priority:

- 1) Structuring/Functional Testing
 - In the near term we will need to do functional testing on prototype for wind up to 120 mph and prove our wind defense system and logic to minimize risk of up-lift. This would require a wind tunnel test. We have been in contact with NREL as an option.
 - We would also need to test pressure loads and seismic activity conditions to address 80% of rooftops in US including lifetime testing to confirm >25 year service life and minimal roof impact
 - We are looking for commercial rooftop installation opportunities through existing commercial roofing contractors to fine-tune and prove our delivery and installation time benefits along with re-deployment capabilities.
- 2) Lab Testing and Certification
 - Our system will need to be certified according to ANSI/UL2703 for mounting systems meeting electrical, mechanical, and fire testing standards. This would include UL 467 testing for Grounding & Bonding Equipment.
 - There are also some state specific certificates like Florida TAS 202 and 100(A) for High Wind Forces and Wind-Driven Rain
- 3) Controller Development
 - Although we are working with a few off the shelf controller options for the tracking system, we want to partner with a company to develop a controller specifically for our rocking tracker solution with appropriate sensors to adjust for wind, snow, hail, cloud, and seismic conditions.
- 4) Product Development for Production
 - After testing we will need to take our prototype and upgrade to a production design.