Zak's challenge details for challenge: Solar Prize

Round 6

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Explanation

We are looking for assistance in moving our proof of concept from a software-in-the-loop environment to a hardware-in-the-loop environment for our solar software control technology. We then must perform robust testing and validation to ensure compatibility with existing inverter and plant control hardware. To achieve this objective, we are specifically looking for experience with PV SCADA and inverter systems, as well as OPAL-RT HIL systems.

Further, our commercial success is dependent on capitalizing on the financial optimization made possible by this technology. For this objective, we are looking for people who are familiar with existing energy markets, ancillary services, and ISO/RTO bid optimization to help us prepare a techno-economic analysis for our technology

Key Needs

- Testing and Validation (5 / 5): Our solution is fully developed in software-in-the-loop, and we are looking to now move to hardware-in-the-loop before deploying fully on a pilot utility-scale solar array.
- Business Development & Commercialization (5 / 5): We are looking for someone with extensive knowledge of the current landscape of utility scale solar as it pertains to competitive market participation. This includes but is not limited to PPAs, day ahead, and real time participation.
- Legal, Insurance, and Public Policy (5 / 5): We are looking for an expert in power grid and interconnection standards.
- Product Development (5 / 5): Our solution is currently developed and simulated in matlab SIMULINK, and we are looking for help in implementing this onto an existing embedded system.
- System Design (5 / 5): We are looking for an expert in embedded systems such as SCADA, PPCs, and smart inverters on solar PV.
- Utility Scale (5 / 5): Our target user is 20 MW> utility scale solar asset owner and operators. Anyone with experience in this sector would be a great connection for our team.
- Funding & Investments (5 / 5): We are interested in gaining assistance in non-dilutive funding opportunities including SBIR and other technically focused resources

Matches

- 1. <u>Zprvme</u>: 82.68%
- 2. EST Venturi Systems LLC: 82.62%
- 3. Larta Institute: 82.55%
- 4. <u>GoSun</u>: 81.64%
- 5. <u>HomeMe Group, Inc.</u>: 81.62%
- 6. University of North Dakota Energy and Environmental Research Center (EERC): 81.59%
- 7. New Mexico Clean Energy Resilience and Growth: 81.59%
- 8. Positive Deviancy: 81.51%

9. <u>NextEnergy</u>: 80.52%

10. <u>Circuit Launch</u>: 79.55%