# Zak's challenge details for challenge: Solar Prize

## Round 6

Generated at Thu Oct 06 2022 15:38:33 GMT-0500 (Central Daylight Time)

#### Explanation

We are looking for assistance in deploying a physical proof of concept of a novel control software for a utility scale solar array. Currently, the control software has been fully developed and executed in the MATLAB Simulink environment. To achieve this objective, we are specifically looking for experience with PV SCADA, PLC and inverter systems, or other renewable energy controls.

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.

### Key Needs

- Testing and Validation (5 / 5): Our solution is fully developed in simulations, and we are looking for a physical proof of concept on a <1 MW solar array</li>
- 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.
- 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 bid optimizations. This includes but is not limited to PPAs, day ahead, and real time participation.
- System Design (5 / 5): We are looking for an expert in embedded systems such as SCADA, PLCs, and smart inverters on solar PV.
- Legal, Insurance, and Public Policy (5 / 5): We are still unsure of what potential red tape hurdles may need to be overcome for integration. We are looking for an expert in power grid and interconnection standards.
- 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

- <sup>1.</sup> <u>Zpryme</u>: 82.76%
- <sup>2.</sup> EST Venturi Systems LLC: 82.71%
- 3. Larta Institute: 82.63%
- 4. <u>HomeMe Group, Inc.</u>: 81.77%
- <sup>5.</sup> <u>GoSun</u>: 81.69%
- 6. Positive Deviancy: 81.69%
- 7. University of North Dakota Energy and Environmental Research Center (EERC): 81.69%
- 8. New Mexico Clean Energy Resilience and Growth: 81.69%
- 0

- <sup>9.</sup> <u>NextEnergy</u>: 80.62%
- 10. <u>Circuit Launch</u>: 79.63%