



Technical Assistance Request

1. Introduction

As we embark on our journey to revolutionize the solar energy sector with our predictive solar intelligence solution, we recognize the need for specialized technical assistance in various areas. Our solution aims to integrate probabilistic solar energy forecasting with battery health diagnosis and prognosis, ensuring optimized energy storage and utilization. To realize this vision, we seek collaboration and support from national labs, private facilities, and members of the American-Made Network.

2. Areas of Assistance

1) Solar Panel Hardware for Testing

- **Description:** To accurately model generation capacity for probabilistic forecasting, we require access to diverse solar panel hardware setups for testing under various conditions.
- **How Assistance Can Help:** Collaboration with national labs or private facilities can provide us with the necessary hardware and testing environments, ensuring our forecasting models are robust and reliable.

2) Decommissioned EV Batteries

- **Description:** Our solution aims to repurpose decommissioned EV batteries or other secondary batteries. We need these batteries to estimate their state of health and predict their remaining useful life.
- **How Assistance Can Help:** Members of the American-Made Network, especially those in the automotive sector, can provide us with access to these batteries, enabling us to refine our battery health diagnosis and prognosis algorithms.

3) Hardware/Software Connection to Home and Grid

- **Description:** Integrating our solution with homes and the grid requires specialized hardware and software interfaces.
- **How Assistance Can Help:** Technical expertise from national labs or private facilities can guide us in establishing these connections, ensuring seamless energy flow and data exchange.

4) Regulation and Compliance

- **Description:** Implementing our solution may encounter regulatory challenges, especially when connecting to the grid or repurposing batteries.
- **How Assistance Can Help:** Collaboration with legal experts within the American-Made Network can help us navigate these regulatory landscapes, ensuring our solution is compliant with all relevant laws and standards.

5) Utility Support for a Pilot Study

- **Description:** To validate our solution's effectiveness and viability, we aim to conduct a pilot study in collaboration with a utility provider.
- **How Assistance Can Help:** Utility members of the American-Made Network can provide us with the necessary infrastructure and support for this pilot study, enabling us to gather real-world data and refine our solution further.



3. Conclusion

Our vision is ambitious, and while we have made significant strides, collaboration with experts and access to specialized resources will be pivotal in realizing our solution's full potential. We believe that with the right technical assistance, Reliable Autonomy can empower homes with predictive solar intelligence, paving the way for a sustainable energy future.