



**03.04.2020**

## **Technical Assistance Request**



**Study By Solar Light**

Solar.20 is a long life solar home power system for use in rural parts of least economically developed countries. Solar.20 solves the problem of having solar lamps in remote parts that fail after 3 - 5 years when batteries fail. Solar.20 batteries using our proprietary battery management system are designed to last 20 years.

We will need technical assistance in several areas as we progress past the American-Made Solar Challenge Round 2 SET Challenge.

We will need to test lithium ion batteries in an accelerated manner per our program and algorithm requirements. We are submitting a Voucher request to the National Renewable Energy Laboratory for this assistance.

Solar.20 will also need programming assistance. We have programmed the Arduino platform to use our processes and algorithms to charge and discharge lithium batteries ranging that match the requirements of 10 watt, 20 watt and 50 watt solar power systems. We will need to verify our existing code and migrate it to a production platform.

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### **Solar.20 Simple User Interface Controller**

We will also need to program into our system an interface with hardware provided by a Pay-As-You-Go vendor. Pay-Go systems allow customers to pay a small amount weekly for solar power. Solar.20 will provide details of our preferred Pay-Go system.

Solar.20 will need to work with a service that takes our designs and 3D models and prepares designs for prototyping and for production.

And finally Solar.20 is looking to create a venture capital ready business plan based on our designs, field data, cost analysis and existing market analysis.

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