

Technical Assistance Request

Hux Energy has a bold vision but will need lots of help to realize this vision. Hux Energy hopes to utilize the American Made Network among other resources to help to ensure the project risk is mitigated, environmental and other policies are being followed, the most cutting-edge technologies and methods are being used, and the proper strategies are being followed and executed.

Hux Energy will need to connect with experts in coastal and offshore renewable energies. The team needs to gain valuable insight on the most up to date practices for offshore renewable technology, especially for knowledge in waterproofing techniques, electronic configurations, and interfacing with a submarine cable system. There are also hopes to connect with someone through the American Made network that has a contact with a company such as MakaiLay for submarine cable consultation. The team also wants to ensure that all local, state, and federal laws, regulations, and policies are being considered so the team will need to consult with an expert in this area. There is already a profound understanding of these regulations, but further consideration and guidance is always a good thing.

The team hopes to use many national laboratories for this project, as these resources will help the proof of concept and validation phases immensely. The team hopes to access the NREL's wave simulator that is located at the Sea Wave Environmental Laboratory in Arvada Colorado. This lab has the capabilities to simulate a plethora of different oceanic conditions. This lab allows for the wet testing of sub scale prototypes for marine research. This lab has experts that will aide in "rapid prototyping." The team can use this facility to help validate the sub scale prototype through testing through various oceanic conditions. There has already been work conducted on developing and planning these tests, should the team be selected to advance.

This facility also has the capabilities to test mooring and anchoring systems. It generates waves at a 1:50 to 1:100 scale and offers load cells, accelerometers, flow meters, pressure sensors, and great observation techniques.

The team also hopes to make a partnership with an American solar panel company. The team needs to develop a partnership to buy solar panels on a large scale so that they can use the panels on the innovation. This partnership would hopefully last a very long time, should Hux Energy be selected to advance.

Hux Energy hopes to utilize the Glenn Research Center's 8ftx6ft wind tunnel. This tunnel will provide the team with the opportunity to test a sub scale prototype at wind speeds that are similar to a hurricane. This test will provide the team with valuable information about the forces and stresses exerted on the innovation during the most rigorous conditions it may face. The team has begun developing a testing procedure and method.

Finally, the team hopes to connect with environmentalists through the American Made Network to discuss environmental impacts of the rapid scalable nature of the innovation and what methods are available to ensure marine life is not affected by this innovation and ways this innovation can even benefit marine life.