



Center for Integrated Electric Energy System
Advanced Energy Research and Technology Center
1000 Innovation Road
Stony Brook, NY 11796

May 23, 2019

Re: Support for designation of Manna Fish Farms as the Center of Excellence

To Whom It May Concern:

Center for Integrated Electric Energy Systems (CIEES) at Stony Brook University is supporting designation of Manna Fish Farms (Manna) as a Center of Excellence in aquaculture.

CIEES is a part of the New York State (NYS) network of Centers for Advanced Technology (CAT). Our goal is to contribute in positioning New York State as a global leader in developing and spearheading renewable energy technologies, clean water and sustainable food. We operate by helping to initiate industry-academia projects through the scientific and technical expertise provided by Stony Brook University and Brookhaven National Laboratory. In every project, we strive to attain the maximum economic impact in terms of new job creation, new revenue and new product launches.

Manna's mission is to expand sustainable aquaculture to the Eastern Long Island Atlantic coast. A large part of Manna's plan is education of local residents about sustainable aquaculture and educational outreach to the local universities and high schools. The Manna facility in Southampton features is a host for a robust research program focused on minimizing the environmental impact of fisheries on the coastal ecosystem. Last month CIEES and Manna signed a \$100 K research agreement. The budget includes a \$50 K cash contribution from Manna and \$50 K NY State cash match from CIEES. The project will employ a graduate student from the School of Marine and Atmospheric Sciences of Stony Brook University. The project goal is development of a smart sensor network that will enable real-time monitoring of fishery operations and data fusion using artificial intelligence algorithms. The project includes collaborations with other industrial or university partners (e.g. IBM, CEWIT at Sony Brook University) and leverages the historic strength of Stony Brook University in Marine and Computer Sciences. The monitoring system is expected to monitor and significantly reduce the environmental impact of varying fishery operations.

In conclusion, we believe that Manna's commitment to educational outreach and operational excellence through scientific research well qualifies the applicant as the Center of Excellence for Aquaculture in the Eastern Long Island area.

Sincerely,

Director, Center for Integrated Electric Energy System