

ICDS, LLC has been providing engineering services to MPPD for more than 12 years for a variety of projects including, but not limited to, specifying transformers/electrical equipment, creating power company standard residential electrical interconnection details, electrical load studies, and the most recent project of designing/commissioning the new microturbine power plant. We understand that the Monhegan Energy Task Force is tasked with providing information to the community regarding the Maine AquaVentus (MAV I) project, a 12MW offshore wind project proposed two miles off of Monhegan Island. ICDS, LLC is not affiliated with Maine Aqua Ventus or their affiliates in any way; however, we thought it might be beneficial to offer our professional opinion of how this project could benefit the community by connecting MPPD electric grid to the mainland electric grid.

Monhegan Island is a small community with a year-round population which doesn't seem to be growing making it nearly impossible to independently fund an expensive infrastructure project to connect MPPD power to the mainland electrical grid. Assuming that this project moves forward, Monhegan Island has a chance to connect their electrical distribution grid to the mainland at no cost to the community with some valuable benefits, including:

- Reliable power from mainland power plants for at least 20 years. The mainland power comes from multiple power plants, not a single power plant.
- Monhegan Island residents can realize the benefits of shore power by a project that is funded by others, not out of pocket for MPPD (island residents). This may be the only feasible means for mainland power because of the enormous financial cost
- Can easily be integrated into the existing island electrical infrastructure at MPPD with minimal changes to the existing distribution infrastructure.
- Would allow the ability to add significant renewable photovoltaic power to the electric grid without the limitation of connecting too much PV to the island grid causing instability issues with the power plant.
- Existing microturbine plant would remain operational in a standby mode in the event the power was out from the underwater cable caused by storm related outages, etc. on the mainland.
- Cost savings could be realized from diesel fire power plant being in "standby mode", including regular maintenance activities. This cost savings could provide money for future upgrades after the MAVI wind turbine project is decommissioned after its 20 year life cycle. A twenty year life allows for long term strategic planning for future power plant needs and infrastructure.
- As part of the power cable installation, fiber communication cable is proposed to be installed with the power cable which will provide enhanced phone, cellular and internet services.

If MPPD/island residents had to fund this project for mainland power out of their own pocket, the capital investment would be a deterring factor for such a small community, negating most of the benefits listed above.