Bay of Fundy – Minas Passage
In Stream Tidal Demonstration Project

NOVA SCOTIA POWER
An Emera Company

In Stream Tidal Demonstration Project

- A Feasibility & Research Undertaking to Determine if the Production of In Stream Tidal Energy can be Successful Employing OpenHydro Technology.

Key Objectives

- Observe and appraise the impact, if any, the OpenHydro In Stream Technology has on the local subsea environment and aquatic species.
- Evaluate the performance of the Tidal Unit's mechanical and electrical systems and structural components.
- Characterize the tidal resource, i.e. MWh's and capacity factor.
- Evaluate the survivability of the unit and gravity base in the Bay of Fundy.

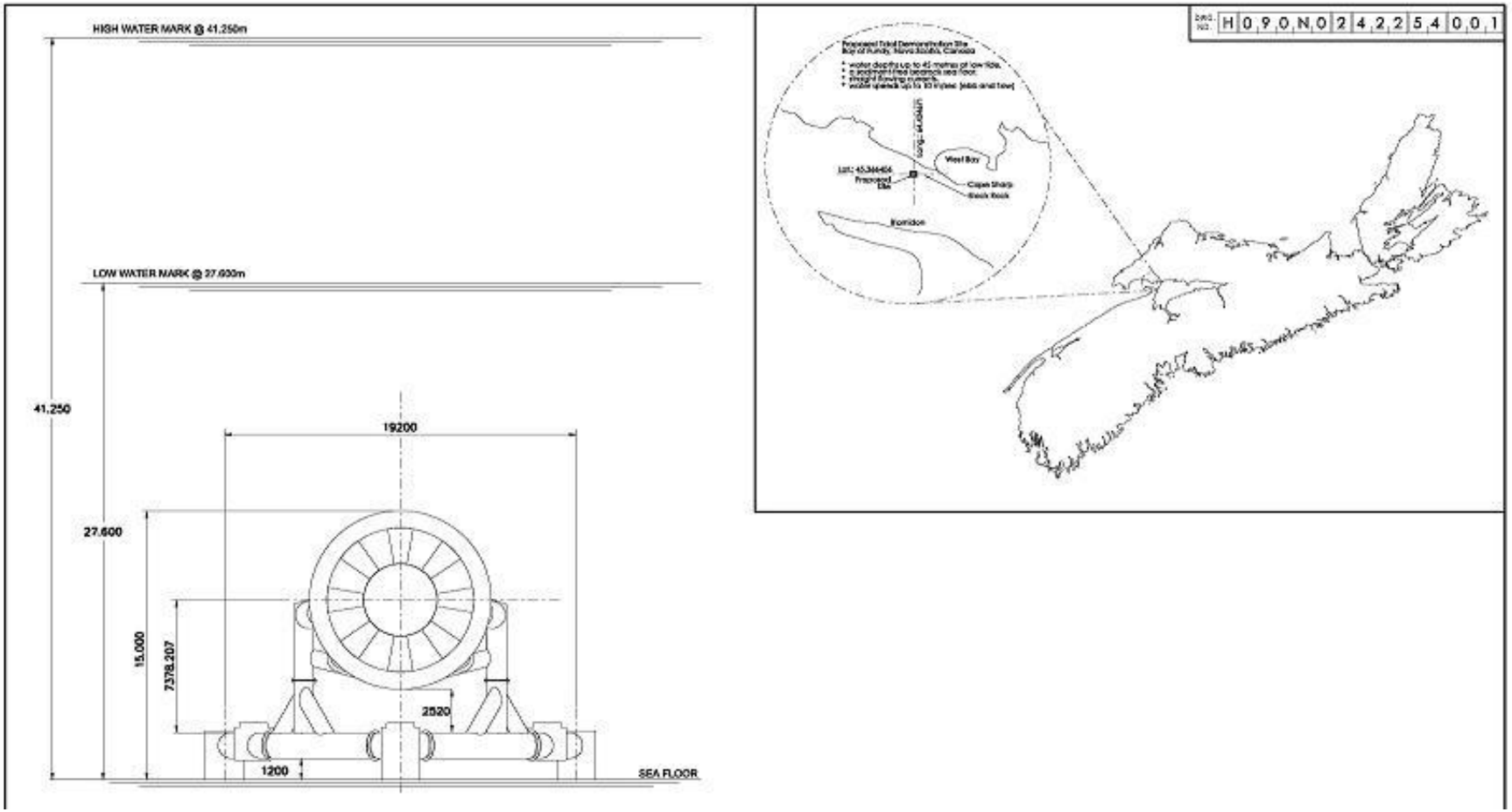
In Stream Tidal Unit and Sub Sea Gravity Base

Specifications

- Permanent Magnet Electrical Generator
- Incorporates a 4 meter diameter circular open centre
- 1 MW of Capacity
- Turbine is 10 Meters in Diameter
- Subsea Gravity Base ~ 20 Meters in length across the back of the triangular shape
- Overall height of structure is ~ 15 meters
- Unit rotates in both directions (flood and ebb tide) from 0 to a max of ~ 15 to 20 RPM

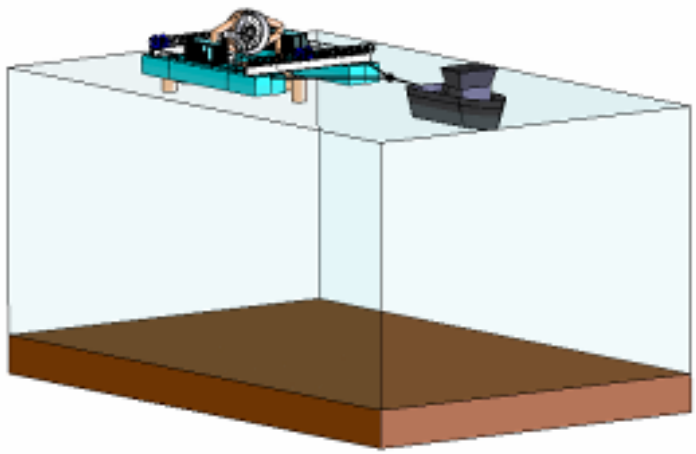
In Stream Tidal Unit

Deployment ~0.5 km West of Black Rock

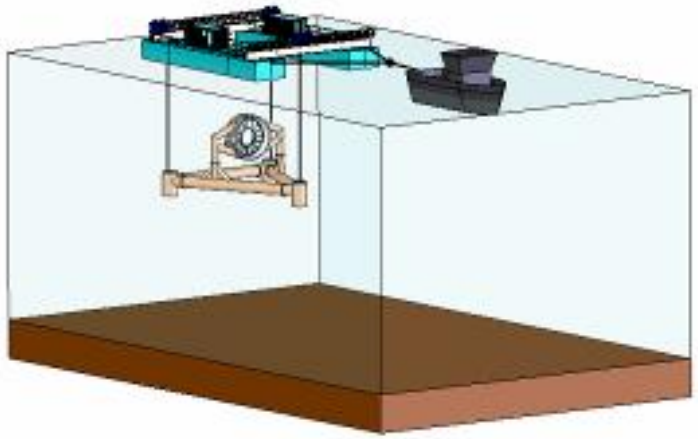


Turbine Assembly Deployment

Barge & Turbine Assembly
Towed to Deployment Site

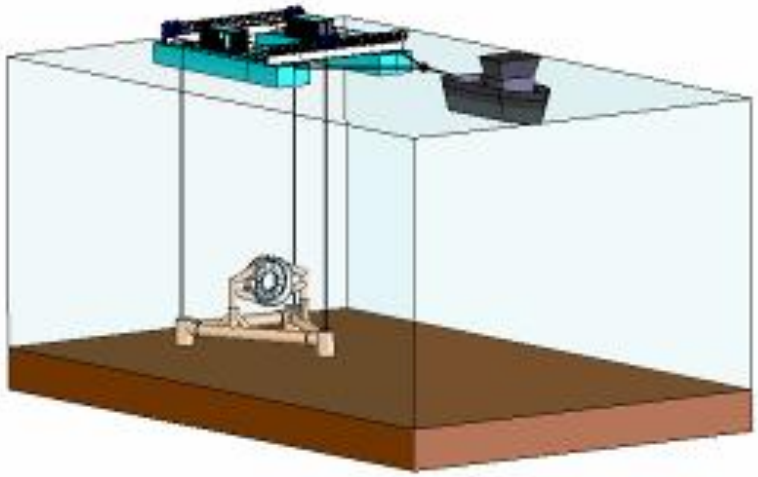


Turbine Assembly Lowered by
Cables to Sea Floor

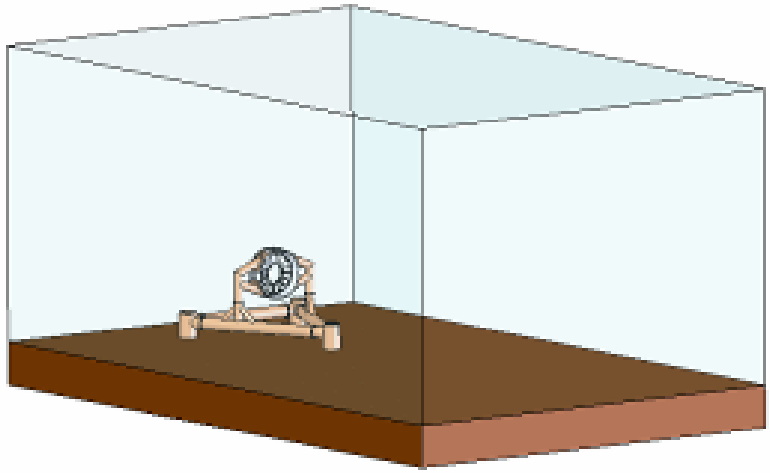


Turbine Assembly Deployment

Subsea Gravity Base Rests on Sea Floor



Tug & Barge Return to Port



Deployment is completed during 1 Flood Tidal Cycle

Thank you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openhydro
tidal technology