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3GA Marine Ltd. is proud to announce its first contract with 3ME Energy Ltd. to design Canada's **first-of-its-kind Mobile Power Barge**—a groundbreaking solution that addresses the urgent need for **clean, zero-emission energy** within our ports and the broader maritime sector.

A New Era of Sustainable Maritime Energy

This innovative project will transform marine energy delivery by providing **renewable power to vessels** at anchor or berth in locations where traditional shore power infrastructure is unavailable or impractical. Key ports such as **Vancouver, Victoria, Prince Rupert, Nanaimo**, and the **areas of the Southern Gulf Islands** will benefit from this **flexible and mobile energy solution**.

Key Features of the Power Barge

- **Zero-Emission Energy:** Powered by **BC Hydro's renewable electricity**, the Power Barge eliminates reliance on large diesel generators onboard vessels while at anchor, significantly reducing greenhouse gas emissions.
- **Smart Energy Storage:** Advanced **AI-driven predictive charging systems** optimize energy use by assessing charging requirements and minimizing power demand. The Power Barge can backfeed power into the grid to provide relief during high-demand periods, charge during low-demand times (e.g., overnight), and reduce reliance on costly power imports.
- **Support for Remote Communities:** Delivers clean energy to remote locations, enhancing resilience and providing critical **emergency power or disaster relief** when needed.

- **Versatile Applications:** Serving various vessel types—including container ships, bulk carriers, cargo vessels, and cruise liners—the Power Barge supports Canada’s **net-zero emission goals** and could accelerate the maritime sector’s transition to zero emissions well before 2050.

A Collaborative Effort Driving Impact

This project demonstrates the collective strength of industry leaders committed to decarbonizing maritime operations:

- **3GA Marine Ltd.:** A leading Naval Architecture and Marine Engineering company dedicated to delivering low- and zero-emission solutions to the maritime sector. 3GA Marine will begin phase 2 contract design for the Power Barge and is set to receive a first-of-its-kind electric tug in January 2025, with construction of an all-electric pilot vessel starting in February 2025.
- **3ME Energy Ltd.:** A British Columbia-based company focused on developing zero- and low-emission energy solutions for marine customers. 3ME will build, manage, and deliver various sustainable vessels to marine service providers such as Tymac, SSA Marine Canada Place, and others.
- **SSA Marine Canada Place:** Managing over 300 cruise ships visiting Vancouver annually, SSA Marine Canada Place plays a key role in terminal operations. While up to 80% of these vessels are shore-power enabled, many are unable to connect due to **infrastructure limitations and varying vessel configurations**. Expanding shore power capacity at the terminal would require substantial investment, making it a costly solution that overburdens an already stressed grid system. The Power Barge, utilizing **clean and renewable BC Hydro energy**, offers an affordable, safe, and reliable alternative that avoids the need for significant infrastructure upgrades. SSA Marine Canada Place fully supports the 3GA Power Barge program as an immediate and practical solution for achieving **sustainable cruise ship terminal operations**.
- **Tymac Launch Service:** Established in 1929, Tymac is a leading marine transportation company operating across the **Port of Vancouver, Port of Nanaimo, Port of Prince Rupert, Port of Victoria, Port Alberni, Indian Arm, Squamish, Port Moody**, and more. Tymac provides services such as pilot boarding, water taxi operations, barge services, cruise vessel waste removal, and transportation of ship’s stores. Tymac diverts over 90% of waste from landfills through its industry-leading recycling programs. Tymac who services the coastline of BC is well positioned to deploy Power Barges along the Coast ensuring the delivery of energy to vessels anchored in each port.
- **BC Hydro:** Actively engaged in supporting the development of 3GA Marine’s innovative power barge technology is a crucial partner to the deployment and utilization of the energy storage systems.
- **Energy Plug and Malahat First Nations:** Bringing advanced energy technologies and Indigenous leadership to drive inclusivity and innovation in clean energy solutions.
- **Ports:** Strong support from various BC Coastal ports including: Port of Nanaimo, Port of Prince Rupert, Greater Victoria Harbour Authority and Vancouver Fraser Port Authority.

Building the Future of Maritime Sustainability

The Power Barge represents a **critical step forward in decarbonizing maritime operations**, creating a **new marine energy marketplace**, and delivering significant economic and environmental benefits. By reducing reliance on costly infrastructure, these mobile energy storage solutions enable an **immediate transition to zero-emission operations**, setting a new benchmark for **sustainable innovation** in the shipping industry.