

McALLISTER TOWING

SUNY MARITIME RISK SYMPOSIUM 2023



UNSURPASSED SERVICE SINCE 1864

Fleet

- Over 50 Jones Act Compliant, Subchapter M tugboats
- 3 car ferries
- 4 crew boats
- One 300' ABS deck barge.

Personnel

- Over 800 maritime employees, including:
 - 500 credentialed Jones Act seamen

Offshore wind projects

- Support vessels
- Crew boats
- Tug and barge support

Technical Management

- LNG operations
- ATB Polaris/Clean Canaveral



Port Congestion

Atlantic Coast Ports Access Route Study 7/8/15.

Shipping lanes.

Channels and anchorages free of subsea cable.

Adequate terminals, layberths, and anchorages.

Drydocks and repair facilities.

Proposed rulemaking notification on ACPARS expected in 2024.

American Waterways Operators and Maritime Association of NY/NJ working to support a safe and efficient renewable energy.



Offshore Wind Vessel Needs






Over 25 different types of vessels are expected to be used to construct, operate, and maintain an offshore wind project. Multiple vessels will be needed for each offshore wind project, but the exact number and types will be dependent on project size, distance from shore, environmental conditions, and other factors. The majority of these vessels will be coastwise qualified (i.e. U.S.-flagged vessels with American crews that are built in the U.S.).

The chart on the following pages describes the different types of vessels projected to be needed during the different offshore wind project stages, including Surveying, Cable Lay, Component Transfer, Turbine Installation, Development, Construction, Decommissioning, and Operations and Maintenance (O&M). The first two vessels, Service Operation Vessels (SOVs) and Crew Transfer Vessels (CTVs) will be the workhorses of the industry. These vessels will be coastwise-qualified vessels, used across the lifetime of the project in both the construction and O&M phases. The remainder of the chart covers the large variety of vessels that could be used during the 2-3 year construction and surveying stages, many of which will be coastwise-qualified. The number of coastwise-qualified vessels used during construction will grow as factories and supply chains are built in the U.S. The number of vessels estimated for each class of vessels (each row) is for an average U.S. 800 megawatt

Deploying 30 GW offshore wind by means shipbuilding opportunities for U.S.-flagged fleet jobs for American mariners.



Construction Vessels

These vessels will be used during the approximately 2-3 years of surveying and construction of offshore wind projects.

Project Stages	Type	What activities will the vessel conduct?
1 Surveying	 Environmental Survey Vessel 2-4 Vessels	Conducts fisheries and benthic surveys on export cable routes and in the lease area. Places LIDAR buoys for various environmental assessments. A variety of vessels do this work: nearshore work tends to be performed by smaller vessels, offshore work utilizes larger vessels.
	 Geotechnical Survey Vessel 1-6 Vessels	Physically samples and tests seabed characteristics to optimally place turbines, substations and cables. Typical surveys are conducted via soil borings to specific depths below the mean seabed.
	 Geophysical Survey Vessel 1-6 Vessels	Acoustically maps seabed features, surface and sub surface, to determine Export Cable Routes and within the Lease Area. Detects and charts unexploded ordnances (UXO).

Project Lifetime Vessels

These vessels are used daily throughout the 35-year lifetime of the project including both construction and operations and maintenance.

Project Stages	Type	What activities will the vessel conduct?
 During Construction: 1-4 vessels During O&M: 0-3 vessels	Crew Transfer Vessel (CTV)	Transfers personnel and light equipment in support of construction and operations. Construction: During construction, both the developer and turbine manufacturer are likely to hire 2 CTVs respectively. O&M: For nearshore projects (less than ~1.5 hours from port) CTVs will be primary for O&M; further offshore projects will use SOVs.
 During Construction: 0-2 vessels During O&M: 0-3 vessels	Service Operation Vessel (SOV) / Walk to Work (W2W) / Commissioning Support Vessel	A Dynamic Positioning (DP2) vessel with motion compensated gangway allowing turbine technicians to "walk to work" directly from the vessel to the turbine. The use of these vessels vs. CTVs depends mostly on distance of the project from shore. Most, but not all, projects will utilize SOVs. Construction: Used for assisting with wind turbine installation and commissioning (bringing turbine and cables online). Developers and turbine manufacturers are likely to hire one SOV each. O&M: Wind turbine servicing and operation.



Offshore Wind Investments in U.S.-flagged Vessels

The offshore wind industry is already investing in over 30 new offshore wind vessels. Investments include 22 Crew Transfer Vessels (CTV), 3 Service Operation Vessels (SOV), 4 different types of installation vessels, and 3 tugs and barges.



Vessel Type	Vessel Name	Status	Location	Manager
Barge	Kirby Barge	Ordered	U.S.	Kirby Offshore Wind
Piling Installation Vessel	Bleutec Piling Installation Vessel	In Discussion	U.S.	Bleutec Industries
Rock Installation	Great Lakes Rock Installation	Under Construction	Philly Shipyard, PA	Great Lakes Dredge and Dock
SOV	Eco Edison	Under Construction	Edison Chouest, LA	Edison Chouest Offshore
SOV	Cade Candies	Retrofit	Candies Shipbuilders, LA	GE/Otto Candies
SOV	North Star Navigator	Retrofit	North Star Marine, NJ	North Star Marine
SOV	Paul Candies	Retrofit	Candies Shipbuilders, LA	Siemens Gamesa/Otto Candies
SOV	CREST SOV	Ordered	Fincantieri, WI	Crowley/ESVAGT
SOV	Equinor SOV	Ordered	Edison Chouest, LA	Edison Chouest Offshore
SOV	Bleutec SOV	In Discussion	U.S.	Bleutec Industries
Tug/Barge	Kirby Tug/Barge 1	Ordered	U.S.	Kirby Offshore Wind
Tug/Barge	Kirby Tug/Barge 2	Ordered	U.S.	Kirby Offshore Wind
Wind Turbine Installation Vessel	Charybdis	Under Construction	Keppel AmFELS, TX	Dominion Energy
Wind Turbine Installation Vessel Light	Wind Turbine Installation Vessel Light	In Discussion	U.S.	Bleutec Industries

Vessel Type	Vessel Name	Status	Location	Manager
CTV	AWT CTV 3	Under Construction	St. Johns Ship Building, FL	Atlantic Wind Transfers
CTV	PATRIOT CTV	Under Construction	Gladding-Hearn Shipbuilding, MA	Patriot Offshore Maritime
CTV	WINDEA CTV 1	Under Construction	St. Johns Ship Building, FL	Windea
CTV	WINDEA CTV 2	Under Construction	St. Johns Ship Building, FL	Windea
CTV	AOS CTV 1	Ordered	Blount Boats, RI	American Offshore Services
CTV	AOS CTV 2	Ordered	Blount Boats, RI	American Offshore Services
CTV	AOS CTV 3	Ordered	Blount Boats, RI	American Offshore Services
CTV	AOS CTV 4	Ordered	Blount Boats, RI	American Offshore Services
CTV	AOS CTV 5	Ordered	Blount Boats, RI	American Offshore Services
CTV	AOS CTV 6	Ordered	Blount Boats, RI	American Offshore Services
CTV	AWT CTV 4	Ordered	St. Johns Ship Building, FL	Atlantic Wind Transfers
CTV	AWT CTV 5	Ordered	St. Johns Ship Building, FL	Atlantic Wind Transfers
CTV	AWT CTV 6	Ordered	St. Johns Ship Building, FL	Atlantic Wind Transfers
CTV	AWT CTV 7	Ordered	St. Johns Ship Building, FL	Atlantic Wind Transfers
CTV	AWT CTV 8	Ordered	St. Johns Ship Building, FL	American Offshore Services
CTV	WINDEA CTV 3	Ordered	Gulf Craft, LA	Windea
CTV	Windserve CTV 2	Ordered	Senesco Marine, RI	Windserve Marine
CTV	Windserve CTV 3	Ordered	Senesco Marine, RI	Windserve Marine
CTV	Windserve CTV 4	Ordered	Senesco Marine, RI	Windserve Marine
CTV	Atlantic Endeavor	In Service	Blount Boats, RI	Atlantic Wind Transfers
CTV	Atlantic Pioneer	In Service	Blount Boats, RI	Atlantic Wind Transfers
CTV	Windserve Odyssey	In Service	Senesco Marine, RI	Windserve Marine

Political Pressure, Permitting, and Regulatory Issues Create Capital Risk

- Avangrid's Commonwealth Wind 1.2GW project cancelled, paying \$49M termination fee.
- Shell/EDP SouthCoast Wind 1.2GW project cancelled 10/3/23, paying \$60M in termination fees.
- Avangrid cancelled "unfinanceable" Park City Wind 800MW project 10/3/23, paying \$16M penalty.
- Orsted cancelled 2.2GW Ocean Wind 1 and 2 projects 11/7/23, paying \$300M penalty. \$4B writedown. YTD stock down 60%.
- Orsted's 700MW Revolution Wind received BOEM Record of Decision 8/22/23 and Final Investment Decision 10/31/23. 4th project underway.
- Nascent industry needs prototype financing. Stability, standardization and efficiency would help.



CREW TRANSFER SERVICE IS ONGOING.

As of October 2023

139 crew transfer jobs using
3 vessels since 2017

Gaspee

- 24 offshore wind and other jobs

McCrews

- 54 river services jobs

The Hunter

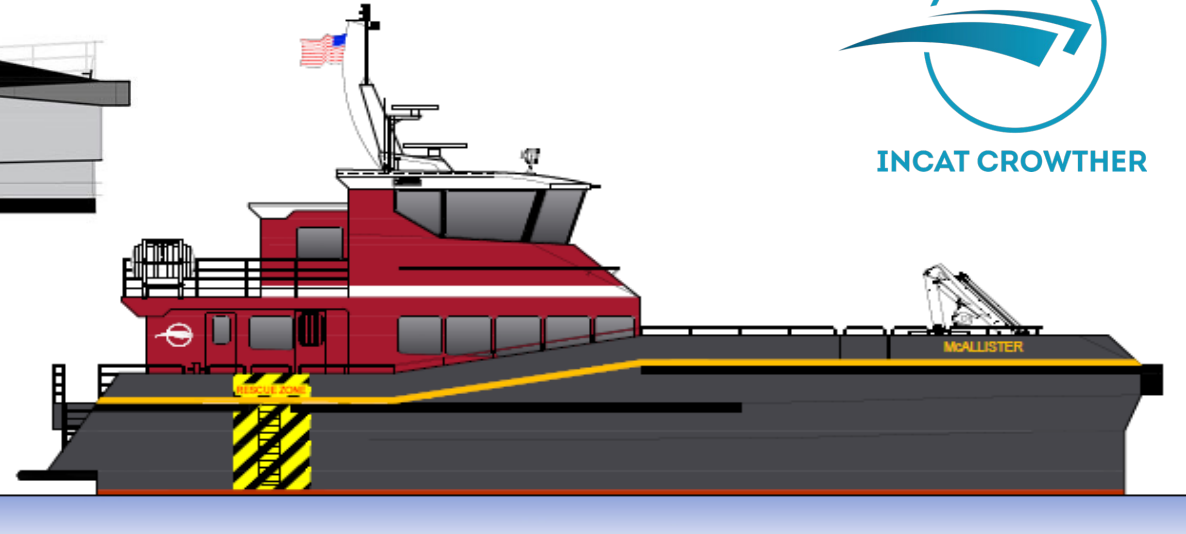
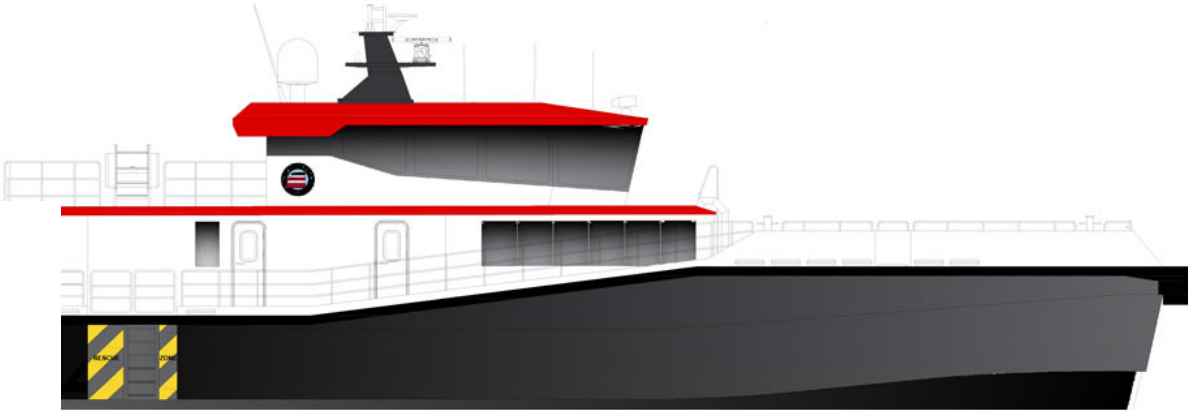
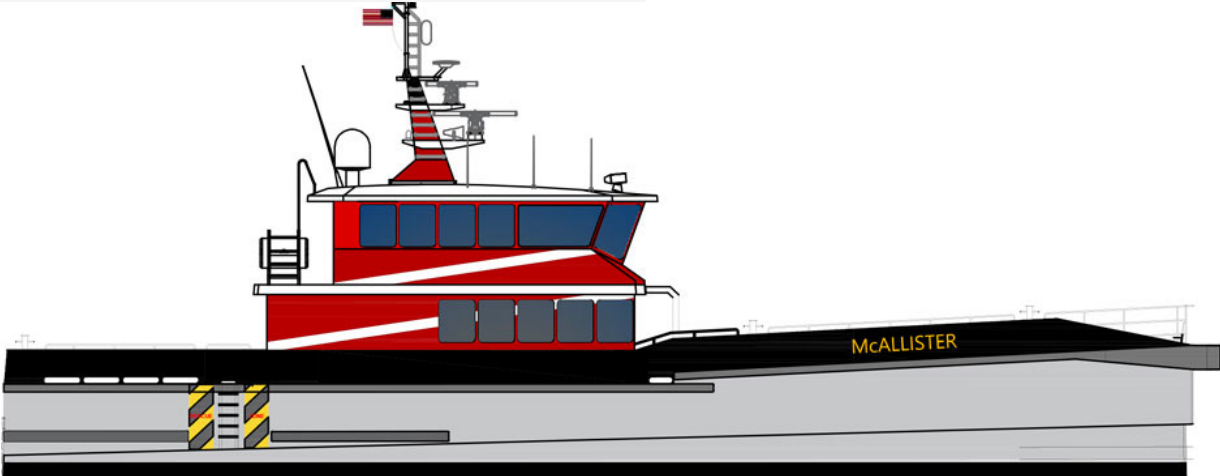
- 61 bulk carrier, supplies, and other jobs

Roger Williams

- New vessel currently being repurposed for crew and supply deliveries to monopiles, fuel storage, and satellite communications



CTV VESSEL DESIGNS



BREEZE SOV

VESSEL DESIGN

BREEZE
Ship Design

