OFFSHORE WINDFARM SUPPORT VESSELS

As the leading provider of classification services to the global offshore industry, ABS is in a unique position to support the new vessels serving the evolving fixed and floating offshore windfarm turbine market.

LEADING CLASS SERVICES PROVIDER FOR INNOVATIVE WIND FARM VESSELS

Offshore wind farm development is driving the need for support vessel innovation. Flexible service operation vessels (SOV) can be adapted to transport crews, serve as their offshore quarters, workshop, and as a mobile warehouse for supplies, equipment, and tools.

Due to ever-increasing environmental regulations, owners of wind farm support vessels also need to consider alternative fuel types such as hybrid battery power or LNG. Regardless of a vessel’s design or its fuel, ABS can provide classification services for a range of wind farm vessels that will help them meet cabotage rules and safety requirements for initial certification and operational compliance. These vessels include:

- Wind Turbine Installation Vessel (WTIV) - typically self-elevating jackup for shallow water, floating heavy lift construction vessel for deep water
- Service Operation Vessel (SOV)
- Cable Laying Vessel
- Crew Transfer Vessel (CTV) - high speed craft to transfer crew and service technicians

PROVIDING CLASSIFICATION SERVICES

The ABS Guide for Building and Classing Wind Farm Support Vessels published in 2018 specifies the classification requirements for vessels containing equipment for maintaining and repairing facilities in offshore windfarms, as well as transporting industrial personnel between a shore-based facility and offshore wind farms. Wind Farm Support Vessels may also carry cargo as part of their normal operations.

During development, requirements applied to ABS classed Offshore Support Vessels and High-Speed Craft are considered and customized in view of the unique configurations and the typical service routines of Wind Farm Support Vessels. As a result, the hull scantlings for High-Speed Wind Farm Support Craft are derived based on the anticipated en-route weather conditions.

ABS Rules for Building and Classing Marine Vessels Part 5D, Offshore Support Vessels for Specialized Services contain specific classification requirements for vessels intended for:

- Installation, maintenance and repair of wind turbines
- Heavy lift operation
- Transportation of wind turbines and their components
- Installation, maintenance, and repair of underwater power transmission cables

ABS Rules for Building and Classing Mobile Offshore Units applies Part 8 Chapter 8 to mobile offshore units primarily intended for the installation, maintenance, and repair of offshore wind turbines, including pile driving, tower installation, and nacelle and blade installation. Units may include various equipment to perform or support functions such as pile driving, installation, maintenance and repair of jacket, tower, nacelle and/or blade.