

NEDO Green Innovation Fund Project for Floating Offshore Wind (R&D for floating offshore wind farm and hybrid mooring systems) / ClassNK awards JMU AiP for the conversion of medium-sized SEP vessel for the installation of large size wind turbines on semi-sub floaters at base port

Japan Marine United Corporation (JMU), Nihon Shipyard Co., Ltd. (NSY), and TOA Corporation (TOA) have been jointly awarded an Approval in Principle (AiP) for the conversion of medium-sized SEP vessel for the installation of large size wind turbines on semi-sub floaters at base and service port for offshore wind industry.

JMU semi-sub floater design has competitive advantages in its very shallow towing draft, meaning less constrains of port entry. Such JMU semi-sub floater design also enables the installation of wind turbines at the base port where there is less effect on tides and waves, if the floater is towed there. Unfortunately, however, as the capabilities of the traditional port facility is not ready to host the floating offshore wind facilities, land-based large cranes with sufficient lifting and reach capability, which does not exist in Japan, as well as the quay reinforcement are essential for the installation of large wind turbine over a 12MW capacity at base port.

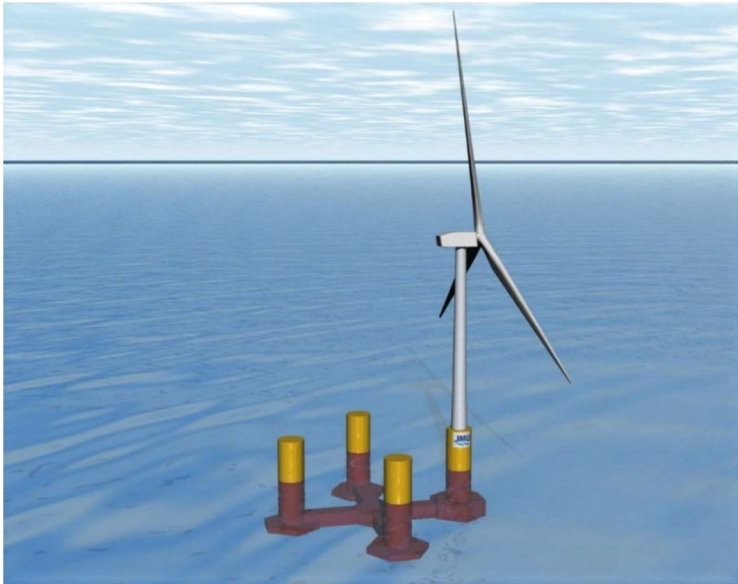
To cover such insufficient capabilities of the traditional port facilities, JMU has sought to find the ways to make much use of the medium-sized SEP vessel to install the large size wind turbines. R&D for necessary conversion for such use has been performed by JMU, NSY and TOA based on the SEP vessel fitted with a 1,250-ton crane under construction at JMU and to be co-owned by TOA and other company after her delivery, and finally in April 2023 ClassNK issued the AiP for such conversion plan.

Even though the development of marshalling ports to support the floating offshore wind is proceeded, JMU expects this concept, enabling to provide more choices of base port, must promote the expansion of floating offshore wind power generation.

This project is one of the R&Ds under the NEDO Green Innovation Fund Project for Floating Offshore Wind (R&D for floating offshore wind and hybrid mooring systems), which has been jointly carried out by

JMU, NSY, TOA and K-Line Wind Services as consortium. JMU moves steadily forward the entire funding R&D and will also prepare for NEDO's funding project Phase 2, pre-commercial development of floating offshore wind farms.

JMU will contribute to environmental protection and social development by promoting expansion of renewable energy in terms of the realization of floating offshore wind and carbon neutrality.



(Image : JMU semi-sub floater)



(Image : candidate SEP)

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