### DNV.GL



# NOBLE DENTON MARINE SERVICES

Marine warranty for offshore wind

SAFER, SMARTER, GREENER



## PIONEERS OF MARINE WARRANTY SURVEYING

DNV GL is a leading authority on operational risks and the feasibility of working practices across all aspects of marine operations in the wind energy sector.

Our Noble Denton marine services have been active in the marine warranty market for more than half a century. We are one of the market leaders in the provision of marine warranty surveys to the wind energy industry.

We technically audit the readiness of marine operations, and provide independent and impartial advice for vessel owners, operators and underwriters. Noble Denton pioneered the marine warranty concept for the North Sea in the 1960s and, as part of DNV GL, our offer is now stronger than ever. Our independent teams of master mariners and specialist engineers lead the field in project approvals for all aspects of temporary phase marine operations, from the construction yard to installation and hook-up.

We specialize in the site-specific approval of mobile offshore units including jack-ups, semi-submersibles and drill ships. Our involvement in establishing international standards for this work enables our teams to provide the most accurate and informed assessments for our customers.

By safeguarding life, property and the environment, we help our customers to manage risk and build sustainable businesses that balance commercial demands with safety and social responsibilities.

#### MEETING THE NEEDS OF THE OFFSHORE WIND INDUSTRY

Offshore wind projects have specific needs and requirements; in particular, when it comes to time optimisation. There are also numerous challenges associated with installation vessels, as well as weather conditions, that must be overcome in order to ensure the efficient installation of offshore windfarms. DNV GL understands the challenges and works to support customers towards safe operations.

DNV GL was one of the very first marine warranty service providers to apply its expertise to the offshore wind industry. We have provided marine warranty services to most of the offshore windfarms in Europe. Today, we are building on that experience to provide customers with cost-efficient services that don't compromise on quality or integrity.

## MARINE WARRANTY SURVEY SERVICES IN DETAIL

Marine warranty survey (MWS) services verify the requirements laid down by the insurer or underwriter in warranty clauses connected to the respective marine operations. This ensures that all necessary precautions are taken to keep the risks As Low As Reasonably Practicable (ALARP).

Our Noble Denton marine services provide marine warranty for complex operations associated with the construction, towage and installation, and decommissioning of steel jackets, concrete structures, floating structures, wind turbine generators, transformer stations, power cables and subsea equipment.

We offer impartial technical audits, expert risk evaluation and feasibility assessments to verify the requirements of an operation, as presented in the operator's scope of work and identified in the insurer's policy wording. Our services include:

### Engineering document review and approval

Our global teams of specialist engineers, mariners and naval architects work with customers to review documents related to a wide range of temporary phase marine operations and land transportation. These include:

- Location survey analysis review and approval for a range of cases including jack-up moves and semi-submersibles.
- Load-out analysis review and approval for lifting, skidding and roll-on/off procedures.
- Transportation analysis review and approval, including sea-fastening, stability and motion response.
- Installation analysis review and approval for procedures such as lifting, up-ending, pile drivability, mooring and float-overs.
- Cable lay document analysis and procedure review.

### **On-site surveillance**

We attend the world's most complex marine operations, providing independent oversight on behalf of operators, vessel owners and underwriters. Our services include:

 Condition and suitability surveys for a wide range of vessels, including barges, heavy-lift vessels, jack-up vessels, tugs and transportation vessels.

- Load-out attendance (floating, lifted, skidded or trailered), including equipment, rigging and procedural verification.
- Towage surveys, including vessel audits, tow gear inspections and route planning reviews.
- Transportation surveys, including the verification of sea fastening completion, tow approvals, acceptable weather criteria approvals and personnel reviews.
- Installation attendance, including the verification of foundation installation, tower, nacelles and blades installation, cable laying and mating of transformer stations.



### Setting the standard

Our Noble Denton marine services have been setting the standard in marine warranty for over 50 years. Much of the industry follows our guidelines, standards and rules, and we have contributed significantly to developing global best practice in marine operations. But, with the oil and gas and offshore wind sectors working on more complex projects in increasingly challenging environments, we believe that the benchmark can always be higher. Every year, we invest 5% of our revenue back into research and development to keep us at the forefront of our customers' challenges. That results in more robust standards that are firmly aligned with industry best practice. When combined with the deep technical expertise that we bring to the complete asset lifecycle, these result in true risk reduction for our customers.

#### About DNV GL

DNV GL is the world's largest ship and offshore classification society, the leading technical advisor to the global oil and gas industry, and a leading expert for the energy value chain, including renewables and energy efficiency. We are also one of the top three certification bodies in the world. Find out more at: **www.dnvgl.com**