

11. UNITED KINGDOM - OFFSHORE RENEWABLE ENERGY DEVELOPMENTS - WIND TURBINES.

Source: UK Hydrographic Office and Maritime and Coastguard Agency.

Former Notice 3397(P)/03 is cancelled.

1. The United Kingdom has significant potential for the generation of electricity from offshore renewable sources such as wind, tidal streams and waves. Offshore wind technology is already advanced to the extent that the industry is poised for major and rapid development. In December 2000, the Crown Estate announced the first invitation to developers to apply for 'Round 1' site leases for the development of offshore wind farms. A second invitation by the Crown Estate resulted in the allocation, in December 2003, of a number of potential 'Round 2' site leases in three general regions: the Thames Estuary, the Greater Wash and the North West of England. In addition, certain wind farms are already consented and others proposed in Welsh, Northern Ireland and Scottish waters.
2. Round 1 wind farm developments are wholly contained within United Kingdom (UK) territorial waters and typically limited to 30 turbines. Round 2 developments, however, may in future be found both within and beyond UK territorial waters and the largest developments, when built, may have between 240 and 300 turbines.
3. The typical offshore wind turbine generator has several components. The turbine is mounted on a tower on a platform connected to the foundations. The foundations may be a mono-pile sunk into the seabed, an anchored tripod, or a caisson (basket) filled with aggregate. The foundations themselves may be surrounded by rocks which protects them from the scouring action of currents. The network of cables from individual turbines may, in some cases, be connected to a separate platform containing electrical switchgear, transformers and other equipment which condition the power ready for transmission along a cable to an onshore substation.
4. The outer perimeters of offshore wind farms will be marked and lit in accordance with IALA Recommendation 0-117 (May 2000). Marking and identification of individual turbines, for visual detection and search and rescue (SAR) purposes, should be in accordance with the guidance issued by the Maritime and Coastguard Agency (MCA) and contained with Marine Guidance Note (MGN) 275. A copy of the MGN, which details guidance to developers on these and other navigational safety matters, may be downloaded from the MCA website at www.mcga.gov.uk.
5. The United Kingdom Hydrographic Office will continue to liaise with the relevant offshore wind farm developers and other authorities in order to promulgate safety-related information and to update Admiralty Charts.