

NASCA Comments to the New Jersey Blue Ribbon Panel on Development of Wind Turbine Facilities in Coastal Waters

The North American Submarine Cable Association (NASCA)¹ is pleased to make this submission to the Blue Ribbon Panel on Development of Wind Turbine Facilities in Coastal Waters. The information contained in this submission is based on current cable repair installation and maintenance practices and assumes that Wind Turbine Facilities will require some exclusion zone.

This submission provides the principles that NASCA recommends be used when undertaking the planning of new Wind Turbine Facilities and Submarine Cables where the planned Facility approaches close to an existing Cable. It also considers principles for the ongoing maintenance and operations of the cable and Wind Turbine Facility.

Owners of Wind Turbine Facilities and those planning construction are recommended to contact Submarine Cable Owners during the initial planning stage for information on existing and planned submarine telecommunication cables. As NASCA represents the vast majority of submarine cable owners with cables in New Jersey waters, NASCA can be the primary contact for any planned Wind Turbine Facility. NASCA can be contacted via its web site www.n-a-s-c-a.org.

Owners of Wind Turbine Facilities and Submarine Cables share a common need to protect their turbines and cables from external aggression as well as having the ability to operate and maintain their turbines and cables throughout their operational life.

NASCA propose that any separation between Wind Turbine Facilities and Submarine Cables be agreed during the planning stage. If Wind Turbine Facilities are to have an exclusion zone around the turbines then it is potentially unreasonable to position them where it would force a Submarine Cable owner who has to maintain their existing Cable to enter that exclusion zone in order to carry out a repair. NASCA recommends that the Wind Turbine Facilities should allow access for a cable ship to repair the existing system in the event of a cable fault. The maneuverability and station-keeping (dynamic positioning) properties of a ship should all be taken into account when actually planning a repair or maintenance in the proximity of a Wind Turbine Facility. These principles are also recommended for the separation of new telecommunications cables from existing Wind Turbine Facilities.

The recommended separation between Submarine Cables and a Wind Turbine Facility is dependent upon numerous factors including but not limited to; the presence of an exclusion zone around the Wind Turbine Facility, depth of water, currents and tides as well as the characteristics of the local cable repair vessels and turbine installation platforms. In addition, NASCA recommends that Wind Turbine Facility developers consult the International Cable Protection Committee (ICPC)
Recommendation: -

No.7 “Procedure To Be Followed Whilst Offshore Civil Engineering Work Is Undertaken In The Vicinity Of Active Submarine Cable Systems”

This recommendation is available via the ICPC web site www.iscpc.org

¹ NASCA is a non-profit trade association consisting of companies that own or maintain submarine cables that land in North America. NASCA’s current members are Alaska United Fiber System Partnership, Alcatel Submarine Networks, AT&T Corp., Global Crossing Ltd., Global Marine Systems Ltd., GlobeNet, Hibernia Atlantic, Level (3) Communications, LLC, MCI, New World Network USA, Inc., Southern Cross Cable Network, Sprint Communications Corporation, Teleglobe Canada ULC and Tyco Telecommunications (US) Inc..

When planning the route of the export power cable(s) between the Wind Turbine Facility and the shore it is recommended that Wind Turbine Facility developers consult the following International Cable Protection Committee (ICPC) Recommendations: -

No. 2 “Recommended Routing and Reporting Criteria for Cables in Proximity to Others”.

No.3 “Criteria to be applied to Proposed Crossings Between Submarine Telecommunications Cables and Pipelines/Power Cables

Both these recommendations are available via the ICPC web site www.iscpc.org .

During the construction of a turbine, whether it be coring, piling or installing the tower, where an anchored vessel, platform or barge is used, the closest anchor in the mooring pattern should maintain an agreed upon separation from existing submarine cables. Anchor wires crossing the cable must maintain an agreed upon vertical separation from the cable. These separations should also be agreed during the planning stage.

All project procedures should include detailed charts with all existing cables highlighted. All support vessels must be made aware of the positions of the cables and instructed not to anchor within the agreed upon separation zone.

Advance notification of planned Wind Turbine Facility construction, which will result in power cables running in close parallel to and/or crossing of existing cable routes, shall be made to the owners of the existing cables.

The Wind Turbine Facility owner shall establish a list identifying the maintenance or engineering contacts for every working cable system in the same general area as the Wind Turbine Facility. This list will be used to facilitate required notifications and for obtaining existing cable positional data for use during the planning of the Turbine sites and cable links.

The Wind Turbine Facility owner shall make all reasonable efforts to ensure the planned Facility does not conflict with military, government or any other submarine facilities. Additionally, consultation with NASCA may assist in locating appropriate military and government contacts.

The Wind Turbine Facility owner should inform all relevant Cable Owners of the intention to commence construction operations 30 days prior to commencement. When working close to a Submarine Cable the Wind Turbine Facility owner should provide daily progress reports to the Submarine Cable owner.

The Wind Turbine Facility owner and the Submarine Cable owner should agree to an area of notification for ongoing works. In the event that either party is required to do maintenance in that area of notification the other party is provided timely notification for planned maintenance or not less than 24 hours notification for emergency maintenance and where possible, offer the other party a berth on the repair vessel, at the other party's cost.