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February 13, 2003

Gerald Tourgee
NASCA Secretariat
c/o David Ross Group
127 Main Street
Chatham, NJ 07928

RE: Florida Department of Environmental Protection proposed rulemaking

Dear Mr. Tourgee:

As requested, I have reviewed the report dated December 11, 2002, "A Professional Jury Report on the Biological Impacts of Submarine Fiber Optic Cables on Shallow Reefs Off Hollywood, Florida," released by Public Employees for Environmental Responsibility (PEER). I have prepared the attached detailed response, which points out and corrects numerous errors and misleading statements in the PEER Report. This letter provides a summary of the main points.

First, the label "Professional Jury Report" gives a misleading sense of academic rigor. The report clearly was not peer-reviewed, as made clear by the numerous technical errors it contains, some of which are noted below.

Second, the PEER report incorrectly links submarine cables to regional problems of reef decline. The report at page 3 seems to cite Done *et al.* (1996) as saying "fiber optic cable deployment may change benthic species composition," but that article never references fiber optic cables. Similarly, the PEER report (p. 3) misleadingly cites several studies of beach restoration projects as if they supported the statement that cables "cause damage to the reefs through direct impact damage and the resettling of suspended settlement", but those reports also did not address cables. The major natural and human factors affecting the health of Florida's reefs are briefly summarized in the attached; they include sewer outfalls, other nutrient enrichment, overfishing, sedimentation, and global warming, but not submarine cables. Anchoring by recreational boaters has a greater adverse cumulative impact on southeast Florida's fringing reefs than do submarine cables. Constructing and requiring the use of permanent moorings at popular hardbottom areas would do more to protect those reefs than would additional restrictions on cable-laying.

Third, the PEER report overstates the impacts of recent cable projects on hard corals, gorgonians and sponges. For example, it incorrectly states (p. 16) that a recent project damaged hundreds of hard corals; in fact, as detailed in the enclosed, the total area of hard coral impacted was only about five (5) square feet, and most of that area was corals merely shaded, not touched, by the cables. It incorrectly states (p. 14) that hard coral coverage of the hard bottom areas near Hollywood is 7.8%, when in fact it is only 2 to 3%. It reports PEER's attempt to quantify damage of hard corals, gorgonians and sponges near recently installed cables and to compare it statistically to naturally occurring damage distant from such cables, but the survey and statistical methods used appear to be flawed, as detailed in the attached report. The attached report also contains photographs showing that even sponges damaged by cable installation heal and re-grow

around cables; gorgonians attach to and grow on cables; and even fragile hard corals grow bracketing cables, proving that the cables have not moved since their installation.

Fourth, the PEER report overstates the potential for anchor dragging or other forces to move cables laterally across the bottom after their initial installation. We have found anchors that must have been snagged on a cable and abandoned, but have never seen evidence of resulting cable movement. In 1999, PBS&J fastened stainless steel pins to the hardbottom every 250 feet along two of the Hollywood cables, connected to these cables by plastic ties that would release if tugged. In our annual reinspection of those two cables, we have not seen any of those ties broken or opened, despite 20-year storm events in 2001 and 2002. The many photos we have of corals and sponges growing on or next to cables also show that such cables have not moved. At most, at a couple of locations near localized cable suspensions, we find a cable rubbing a few inches laterally across a supporting hard coral.

Last, the PEER report seems to question the applicability of the Habitat Equivalency Analysis (HEA) and the adequacy of the mitigation that has been provided for the small amount of damage done to hard corals, gorgonians and sponges by cable installations. The report seems to misunderstand the HEA and how it has been applied to these projects. The HEA has been applied looking at impact to all hard bottom, not just to hard corals. The artificial reefs are succeeding at providing new hard bottom habitat, naturally recruiting corals and sponges, and serving as a location for manual re-attachment of hard corals found naturally dislocated on the hard bottom by bio-erosion. Conservative estimates were used for natural recovery times of impacted areas. To be further conservative, the four recent projects at Hollywood, Boca Raton, and Sunny Isles have provided many times the amount of mitigation called for by the HEA calculations (e.g., seven times the amount calculated for the Hollywood cables, and 26 times the amount calculated for the Sunny Isles cables). Therefore, in my professional opinion, the mitigation provided for the current permitted projects has more than offset actual impacts caused by the projects.

If you have any questions, do not hesitate to contact me at (904) 367-8683 extension 242 or at drdeis@pbsj.com.

Sincerely,

PBS&J



Donald R. Deis, M.S., C.E.P.
Senior Scientist