1. Add new definitions to 555.2 to read as follows:

**Docking Facility.** A covered or open, fixed or floating structure that provides access to the water and to which boats are secured.

**Marina.** A facility, generally on the waterfront, that stores and services boats in berths, on moorings, and in dry storage or stack storage.

2. Revise 555.3 to read as follows:

**555.3 Ground-Fault Protection.** For other than floating buildings covered by 553.4, ground-fault protection for docking facilities shall be provided in accordance with (A) and (B).

**(A) Feeder and Branch Circuit Conductors.** The overcurrent protective devices that supply the Feeder and branch circuit conductors that are installed on marina, boatyards, and commercial and noncommercial docking facilities shall have been provided with ground-fault protection set to open at currents not exceeding 30 mA. Coordination with downstream ground-fault protection shall be permitted at the feeder overcurrent protective device.

*Exception:* Transformer secondary conductors of a separately derived system that do not exceed 3 m (10 ft) and are installed in a raceway shall be permitted to be installed without ground-fault protection. This exception shall also apply to the supply terminals of the equipment supplied by the transformer secondary conductors.

**(B) Receptacles Providing Shore Power.** In lieu of the requirement of 210.8, receptacles installed in accordance with 555.19(A) shall be permitted to have ground-fault protection set to open at currents not exceeding 30 mA.

**Substantiation:** The addition of definitions for “marina” and “docking facility” is necessary to appropriately apply and enforce the safety provisions established for the areas covered by Article 555 that are not currently defined in the NEC. Without these definitions, the enforcement of specific provisions within the article may extend well beyond the intended or necessary areas covered within the scope of NEC Article 555.

The language in NEC 555.3 can be interpreted to require 30mA protection on all circuit breakers located not only on the docking facility but also the entire marina based on the definitions in NFPA 303. A review of the definition of a marina includes a facility that may not be on the waterfront including dry and stacked storage facilities. The term marina and boatyard are removed in the proposed language focusing the requirement for ground-fault protection at 30mA on the docking facility where there is “access to the water and boats are secured.” It must also be recognized that floating buildings are addressed in Article 553 and ground-fault protection for the floating building is specifically addressed in 553.4.
The language of 555.3 is revised to clarify that protection be provided for the branch circuit and feeder conductors. The revised language relieves the concern that ground-fault protection could be enforced on a main breaker at the Service or in a panelboard where all feeders and branch circuits are already protected at 30mA. The language permits levels of ground fault less than 30mA and also permits time delay where 30mA is provided on a branch circuit and a feeder to support coordination of the circuits.

Where a transformer resides on the docking facility, it would be difficult to provide protection on the conductors from the transformer to the first panel, so an exception has been added for not protecting the transformer secondary conductors with a secondary conductor length restriction of 10ft.

Finally, 210.8(B) in the 2017 NEC introduced a general requirement to protect all receptacles 150V to ground with GFCI. A new Item (B) has been added in 555.3 to permit receptacles providing shore power to be protected at 30mA. All of these revisions provide significant clarification for the designer, installer and enforcer to relieve challenges potentially imposed by the existing language while retaining the protection for the docking facility.

**Emergency Nature:** The proposed TIA intends to correct a circumstance in which the revised NFPA Standard has resulted in an adverse impact on a product or method that was inadvertently overlooked in the total revision process or was without adequate technical (safety) justification of the action.

The electrical industry introduced enhancements in safety in the 2017 NEC for Marinas. Preliminary information from the Fire Protection Research Foundation activities, working to understand Electric Shock Drowning, supported the code panel action to establish an enhanced ground fault protection solution. The Fire Protection Research Foundation has published a report detailing the issues around electric shock drowning and the need to address protecting the public. State and Federal agencies are working to adopt and enforce the 2017 NEC requirements established in Article 555, however the clarity of the revised language in NEC 555.3, and the general requirement in NEC 210.8(B) for outdoor receptacles, has created confusion for installers and users of docking facilities.

The addition of these definitions will ensure the appropriate application of the requirements. Without these definitions, the requirements for the article can be extended well beyond the intended areas. The 2017 NEC 555.3 language is confusing and has resulted in the delay of electrical upgrades for existing and new marinas across multiple states. Immediate revisions to the 2017 NEC are necessary to enable state and federal agencies to invest confidently in appropriate protection provision that will enable the electrical system to operate in a safe manner for docking facilities.

*Anyone may submit a comment by the closing date indicated above. To submit a comment, please identify the number of the TIA and forward to the Secretary, Standards Council, 1 Batterymarch Park, Quincy, MA 02169-7471.*