NEI 16-03 Discussion Points

1. Licensee requesting to implement this topical report (TR) shall perform neutron attenuation testing under the applicable material monitoring program (coupon or in-situ testing) at least once every 10 years. For licensees that credit materials with known degradation or degradation mechanisms which result in an anticipated loss of Boron-10 (^{10}B) (e.g., Boraflex, Carborundum, Tetrabor or other phenolic resin-based neutron absorbing materials (NAMs)), neutron attenuation testing must be performed at least once every 5 years. Basic testing as described in section 2.1 shall not be used in lieu of neutron attenuation testing.

2. Licensees requesting to implement Section 2.2 "In-Situ Measurement Program," of this TR, shall include acceptance criteria in the NAM monitoring program to account for a Change in ^{10}B areal density (AD) (e.g. 5% reduction in ^{10}B AD). This condition augments subsection 2.2.A and applies to licensees crediting a neutron absorbing material for which operating experience indicates that potential change mechanisms do not result in a loss of ^{10}B areal density. This additional acceptance criteria ensures that any reduction in areal density is evaluated by the licensee even if it does not challenge the minimum areal density in the criticality safety analysis.

3. In order to ensure clarity in the NRC staff's endorsement of this TR, remove the word "Should" from the following lines of text, and make the statements affirmative:

    a. Page 3 "A coupon testing program should meet the following criteria:"
    b. Page 4 "Both uses of the in-situ measurement should meet the following criteria:"
    c. Page 4 "Coupons should be located such that their exposure to parameters controlling change mechanisms (e.g., gamma fluence, temperature) is conservative or similar to the in-service neutron absorbers."
    d. Page 5 "In-situ measurement campaigns should be performed on an adequate number of panels and at an acceptable interval."