

January 16, 2015

Mr. John W. Stetkar, Chairman  
Advisory Committee on Reactor Safeguards  
U.S. Nuclear Regulatory Commission  
Washington, DC 20555-0001

SUBJECT: DRAFT BRANCH TECHNICAL POSITION 8-9 ON OPEN PHASE CONDITIONS  
IN ELECTRIC POWER SYSTEMS

Dear Mr. Stetkar:

On behalf of the U.S. Nuclear Regulatory Commission (NRC), I am responding to the two recommendations noted in the Advisory Committee on Reactor Safeguards (ACRS) letter dated December 17, 2014 (Agencywide Documents Access and Management System Accession No. ML14343A485), regarding the ACRS review of Draft Branch Technical Position (BTP) 8-9, "Open Phase Conditions in Electric Power System." The staff appreciates the time and effort that the ACRS has devoted to this important subject, as reflected in meetings held with the ACRS Subcommittee for Digital Instrumentation & Control Systems on November 17, 2014, and the ACRS full committee on December 4, 2014.

#### **ACRS RECOMMENDATIONS AND NRC STAFF RESPONSES**

Recommendation 1: BTP 8-9 should be issued, after consideration of the recommendation below.

*Response*: The staff agrees with ACRS's recommendation. The staff intends to issue BTP 8-9 after consideration of ACRS's recommendation and the public comments received via Federal Register Notice 79 FR 32580, dated June 5, 2014.

Recommendation 2: The staff should require similar protection for onsite power circuits connecting to the high voltage side of a plant transformer, unless the circuit is fully contained in an isolated phase bus.

*Response*: The staff agrees with ACRS's recommendation. BTP 8-9 is being revised to clarify protection of onsite power circuits connecting to the high voltage side of a plant transformer, unless the circuit is fully contained in an isolated phase bus or similar bus connections. This will ensure that all potential vulnerable open phase conditions in the plant's electric power system are addressed.

J. Stetkar

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The NRC staff appreciates the comments and recommendations provided by ACRS. We look forward to continuing discussions with the Committee as the staff evaluates future updates to BTP.

Sincerely,

**/RA/**

Mark A. Satorius  
Executive Director  
for Operations

cc: Chairman Burns  
Commissioner Svinicki  
Commissioner Ostendorff  
Commissioner Baran  
SECY

J. Stetkar

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The NRC staff appreciates the comments and recommendations provided by ACRS. We look forward to continuing discussions with the Committee as the staff evaluates future updates to BTP.

Sincerely,

*/RA/*

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Executive Director  
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cc: Chairman Burns  
Commissioner Svinicki  
Commissioner Ostendorff  
Commissioner Baran  
SECY

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\*via e-mail

EDO-002

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