

April 1, 2003

Mr. Anthony Pietrangelo  
Nuclear Energy Institute  
1776 I Street, N. W.  
Suite 400  
Washington, DC 20006-3708

Dear Mr. Pietrangelo:

The Nuclear Regulatory Commission (NRC) has completed its review of the Nuclear Energy Institute Technical Specification Change Traveler, TSTF-447, "Elimination of Hydrogen Recombiners and Change to Hydrogen and Oxygen Monitors," proposed changes to NUREGs-1430, -1431, -1432, -1433, and -1434, Revision 2, "Standard Technical Specifications."

TSTF-447 proposes changes to the Standard Technical Specifications to conform to the proposed revision to 10 CFR 50.44, "Standards for Combustible Gas Control System in Light-Water-Cooled Power Reactors." The proposed amended rule eliminates the requirements for hydrogen recombiners and relaxes the requirements for hydrogen and oxygen monitoring.

The staff has reviewed TSTF-447 and has identified some proposed changes that require modifications. These proposed changes are discussed in the attachment to this letter. As such, TSTF-447 will require revision. This has been discussed with the TSTF.

Please contact me at (301) 415-1161 or e-mail [wdb@nrc.gov](mailto:wdb@nrc.gov) if you have any questions or need further information on these proposed changes.

Sincerely,

*/RA/*

William D. Beckner, Program Director  
Operating Reactor Improvements Program  
Division of Regulatory Improvement Programs  
Office of Nuclear Reactor Regulation

Enclosure: As stated

cc: T. Silko, BWROG  
D. Bice, CEOG  
P. Infanger, BWOOG  
S. Wideman, WOG  
D. Hoffman, EXCEL  
B. Mann, EXCEL

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NAME	KAKavanagh/RLD for	LAHill	RLDennig	WDBeckner
DATE	04/01/2003	03/31/2003	04/01/2003	04/01/2003

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## Discussion of Modifications Needed for TSTF-447

### 1. TS 5.5.2 Primary Coolant Sources Outside Containment

TSTF-447 proposes to revise TS 5.5.2 from all NUREGs to remove the reference to Hydrogen Recombiner as a system outside of containment that could contain highly radioactive fluids during a serious transient or accident. The purpose of the program is to minimize leakage from these systems to levels as low as practicable. The hydrogen recombiner appears in a bracketed list of systems for this program. The staff believes that the program as described in the STS should remain unchanged since the hydrogen recombiner is in brackets and since portions of the hydrogen recombiner system could meet the threshold as a portion of systems outside of containment that could contain highly radioactive fluids.

### 2. Bases 3.6.3.1 [Drywell Cooling System Fans] (renumbered as proposed)

TSTF-447 proposes to revise the wording in the Bases of [Drywell Cooling System Fans] in NUREG-1433. Specifically, the TSTF-447 removes the last sentence of Action A.1 which states "... and the availability of the Primary Containment Hydrogen Recombiner System and the Containment Atmosphere Dilution System." The proposed rule change to 50.44 and the associated model safety evaluation does not address any changes to the Containment Atmosphere Dilution System. Therefore, the discussion about the Containment Atmosphere Dilution System should not be deleted from section A.1 of the Bases in NUREG-1433.

### 3. Bases 3.6.3.2 Primary Containment Oxygen Concentration (renumbered as proposed)

TSTF-447 proposes to revise the Bases of 3.6.3.2 to state that the Specification meets 10 CFR 50.36(c)(2)(ii) Criterion 4, instead of Criterion 2. This change was also documented in the staff's version of the draft technical specification changes and model safety evaluation for public comment. However, this change was incorrect. The primary containment oxygen concentration specification meets Criterion 2 since the UFSAR Chapter 6 calculations assume that the primary containment is inerted, that is, oxygen concentration < 4.0 volume percent, when a design basis LOCA occurs. Therefore, primary containment oxygen concentration is a process variable, design feature, or operating restriction that is an initial condition of a design basis accident or transient analysis that either assumes the failure of or presents a challenge to the integrity of a fission product barrier. Please revise TSTF-447 to show the retention of Criterion 2 as the basis for specification 3.6.3.2, primary containment oxygen concentration.