

ML031560333

June 5, 2003



PLANS FOR ADDRESSING THE DAVIS-BESSE LESSONS LEARNED TASK FORCE RECOMMENDATIONS

BARRIER INTEGRITY

Cayetano Santos, RES

June 4, 2003

BARRIER INTEGRITY ACTION PLAN

**Part I Leakage Detection and
Monitoring Requirements**

**Part II Improved Performance
Indicators**

BARRIER INTEGRITY ACTION PLAN

Part I - Leakage

a. Develop basis for new RCS leakage requirements

- (1) Review bases for current leakage limit**
- (2) Review experience/capabilities of currently used leak detection systems**
- (3) Evaluate capabilities of state-of-the-art leak detection systems**
 - (a) Scope of Action Plan increased to include methods which may be capable of detecting degradation before leakage**
- (4) Evaluate leak rates that lead to degradation**

BARRIER INTEGRITY ACTION PLAN

Part I - Leakage (Continued)

b. Develop recommendations for improved leakage requirements

(1) TS

(2) Inspection Guidance

(3) RG 1.45

c. Incorporate recommendations, as appropriate, into requirements

d. Examine improvements to barrier integrity requirements in addition to those which rely on leakage monitoring

BARRIER INTEGRITY ACTION PLAN

Part 2 - Performance Indicators

- i. Implement improved PI based on current requirements and capabilities**
- ii. Develop and implement an advanced PI**
- iii. Re-evaluate PI based on changes to RCS leakage requirements**

LLTF Report Recommendations Included in Barrier Integrity Action Plan

High Priority

RECOMMENDATION NUMBER	RECOMMENDATION
3.1.5(1)	The NRC should determine whether PWR plants should install on-line enhanced leakage detection systems on critical plant components, which would be capable of detecting leakage rates of significantly less than 1 gpm.
3.2.1(1)	The NRC should improve the requirements pertaining to RCS unidentified leakage and RCPB leakage to ensure that they are sufficient to: (1) provide the ability to discriminate between RCS unidentified leakage and RCPB leakage; and (2) provide reasonable assurance that plants are not operated at power with RCPB leakage.
3.2.1(2)	The NRC should develop inspection guidance pertaining to RCS unidentified leakage that includes action levels to trigger increasing levels of NRC interaction with licensees in order to assess licensee actions in response to increasing levels of unidentified RCS leakage. The action level criteria should identify adverse trends in RCS unidentified leakage that could indicate RCPB degradation.
3.2.1(3)	The NRC should inspect plant alarm response procedure requirements for leakage monitoring systems to assess whether they provide adequate guidance for the identification of RCPB leakage.
3.3.3(3)	The NRC should continue ongoing efforts to review and improve the usefulness of the barrier integrity PIs. These review efforts should evaluate the feasibility of establishing a PI which tracks the number, duration, and rate of primary system leaks that have been identified but not corrected.
3.3.4(9)	The NRC should review PWR plant TS to identify plants that have non-standard RCPB leakage requirements and should pursue changes to those TS to make them consistent among all plants.

Medium Priority Item To Be Added To Action Plan

RECOMMENDATION NUMBER	<i>RECOMMENDATION</i>
3.3.7(3)	<i>Evaluate the adequacy of analysis methods involving the assessment of risk associated with passive component degradation, including the integration of the results of such analyses into the regulatory decision making process.</i>