

UNITED STATES NUCLEAR REGULATORY COMMISSION WASHINGTON, D. C. 20555



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PROPOSED POSITION ON BEW CONTAINMENT ISOLATION SYSTEM

Standard Review Plan 6.2.4, Containment Isolation, specifies in Item II.5. of the Acceptance Criteria that there should be diversity in the parameters sensed for the initiation of containment isolation. We have noted that B&W plarts do not satisfy this criterion. With your concurrence, we plan to implement this acceptance criterion on B&W plants beginning with the Greane County Nuclear Power Plant and BSAR 205 which is the B&W Standard NSSS design.

A brief description of the Engineered Safety Features Actuation System (ESFAS) for the Greene County Nuclear Power Plant will demonstrate the lack of diversity in the parameters used for B&W plants. The ESFAS is the protection system that initiates action of various engineered safety feature devices to mitigate the consequences of a LOCA or secondary system rupture. The ESFAS initiates, in part, the following:

- Emergency core cooling injection, and secondary system isolation and cooling (ECCI initiation), and
- Containment isolation and cooling (CIC initiation).

For ECCI initiation, the ESFAS monitors reactor coolant system pressure, containment pressure (4 psig), and steam line pressure. Upon detection of out-of-limit conditions for these variables, the only lines that will be isolated are the main steam and main feedwater lines, the decay heat removal system return line, and the makeup and purification system letdown and seal return lines. Also, safety related lines will open.

For CIC initiation, the ESFAS monitors containment pressure (4 psig). Upon detection of out-of-limit conditions for this variable, the remainder of the lines penetrating containment that are not safety related will be isolated.

It should be noted that the Westinghouse containment isolation philosophy is just the opposite of Ball's, in that the bulk of the lines penetrating containment are isolated by diverse signals, including low containment pressure and safety injection, and only a few lines are isolated on high containment pressure. We believe that B&W should adopt a similar approach and isolate

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essentially all lines penetrating the containment using diverse signals, especie iy those lines that could potentially be open to the containment atmosphere such as the containment purge system lines. We therefore plan to enforce our position as stated in Standard Review Plan 6.2.4 and require Ball plants to provide diverse containment isolation signals. Lith your approval, we will inform B&W of our intentions via the Greene County and DSAR 205 applications.

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NAC James W. Shapaker, Section Leader Containment Systems Branch Division of Systems Safety

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