

ANS Answers Inquiry on ANSI/ANS-58.14-1993, Safety and Pressure Integrity Classification Criteria for Light Water Reactors.
(Nuclear News, August 2011)

Inquiry:

I would appreciate it if you could clarify the terminology used in the above mentioned standard, specifically what is meant by "pressure integrity" used in the title of the standard as well as throughout the text. This term is different than the terms used in 10CFR50, US NRC Regulatory Guide 1.26, which deals with "pressure BOUNDARY integrity." It appears that the integrity relates to "pressure boundary" and not to "pressure."

Response:

The terminology of "pressure integrity" has been standard terminology when referring to the integrity of a pressure boundary. The insertion of the word "boundary" is implicit in the terminology of "pressure integrity." This usage is not unique with ANS-58.14; it was also used in the parent standards to ANS-58.14, i.e., ANS-51.1 and ANS-52.1, which are the design criteria standards for Pressurized Water Reactors and Boiling Water Reactors. "Pressure boundary integrity" implies that integrity is maintained as long as the leakage is less than the make-up capability or less than or equal to that specified in analyses as discussed in Section 5.5.3.1 of ANSI/ANS-58.14-1993. However, the terminologies "pressure integrity" and "pressure boundary integrity" are interpreted to be the same for the application of the standard.

ANSI/ANS-58.14-1993 has been superseded by ANSI/ANS-58.14-2011
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