

provided, and factor the periodic replacement of parts likely to deteriorate from service into the maintenance practices. When questioned about the expected life of the rubber clappers and O-rings, the manufacturer indicated that a two- to three-year service life was expected. A program of periodic replacement of rubber parts should prevent recurrence of the failures observed.

It was also discovered that a new version of the manufacturer's technical information was now in effect, but the version being used was outdated. Although a direct cause of the valve trip failures was not identified as related to the lack of current manufacturer information, several potential failure modes were found that could be caused by failure to follow the current information. Therefore, correction of administrative controls for obtaining the current manufacturer's information and factoring the information into the operation and maintenance of the valves should prevent future failures.

RESOLUTION/RECOMMENDED ACTIONS: The preventive maintenance of the dry-pipe system valves is being changed to require periodic replacement of the rubber auxiliary clapper assembly parts. In addition to this action, up-to-date manufacturer technical information and maintenance recommendations will be verified for systems, structures, and components important to safety and operations reliability.

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NAME OF AUTHORIZED DERIVATIVE CLASSIFIER: Jeffrey S. Paris
NAME OF REVIEWING OFFICIAL: J. F. Preston
PRIORITY DESCRIPTOR: Yellow/Caution
KEYWORDS: Fire Suppression System, rubber auxiliary clappers, dry-pipe system valves
REFERENCES: ORO--BJC-K25GENLAN-1998-0008
DOE FUNCTIONAL CATEGORIES: Fire Protection
BJC FUNCTIONAL CATEGORIES: FP - Fire Protection
HAZARDS: Fire/NFPA, sprinkler system, failure
WORK ACTIVITY: Safety/Safety Significant Systems; Facility Maintenance

FOLLOW-UP ACTION: Information in this report is accurate to the best of our knowledge. As means of measuring the effectiveness of this report please notify Joanne E. Schutt at (423)574-1248, e-mail at s6u@ornl.gov of any action taken as a result of this report or of any technical inaccuracies you find. Your feedback is important and appreciated.