

ATTACHMENT 1
PROPOSED TECHNICAL SPECIFICATION
FIRE DETECTION IN CONTAINMENT
SURRY POWER STATION

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9. Yard Fire Hydrant and Hydrant Hose Houses - as listed in Table 3.21-3 shall be operable when equipment or structures served by the hydrant or hose house is required to be operable.
 10. Fire Barrier Penetration Fire Seals - protecting safety related areas shall be functional.
- B. Specifications 3.21.A.1 through 3.21.A.10 may be modified as described below provided immediate attention is directed to making repairs.
1. With the number of operable fire detection instruments less than required by Specification 3.21.A.1, within one hour establish a fire watch patrol to inspect the zone with the inoperable instruments at least once per hour, unless the inoperable instrument(s) is (are) in containment, then inspect the containment at least once per 8 hours or monitor the containment air temperature at least once per hour with the permanently installed RTDs.
 2. Specification 3.21.A.2 (Fire Water Suppression System)
 - a. With less than required equipment:
 - (1) Restore the inoperable equipment to an operable status, within 7 days, or provide an alternate means to accomplish the inoperable function.
 - b. With no Fire Suppression Water System, establish a backup Fire Suppression Water System within 24 hours.
 3. Specification 3.21.A.3 (Spray and Sprinkler Systems) - with a sprinkler system inoperable establish a continuous fire watch, with backup fire suppression equipment, for the unprotected areas within 1 hour.

Bases

Fire Detection Instrumentation

Operability of the fire detection instrumentation ensures that adequate warning capability is available for the prompt detection of fires. This capability is required in order to detect and locate fires in their early stages. Prompt detection of fires will reduce the potential for damage to safety related equipment and is an integral element in the overall facility fire protection program.

In the event that a portion of the fire detection instrumentation is inoperable, the establishment of frequent fire patrols in the affected areas or an alternate method of fire detection (permanently installed RTDs) in the containment is required to provide detection capability until the inoperable instrumentation is returned to service.

Fire Suppression Systems

The operability of the fire suppression systems ensures that adequate fire suppression capability is available to confine and extinguish fires occurring in any portion of the facility where safety related equipment is located. The fire suppression system consists of the water system, spray and/or sprinklers, CO₂, Halon, and fire hose stations. The collective capability of the fire suppression systems is adequate to minimize potential damage to safety related equipment and is a major element in the facility fire protection program.

In the event that the fire suppression water systems are inoperable, immediate corrective measures must be taken since this system provides the major fire suppression capability of the plant.

ATTACHMENT 2
DISCUSSION OF PROPOSED CHANGES
SURRY POWER STATION

DESCRIPTION OF CHANGE

The proposed Technical Specification change provides an alternate to the impractical requirement of hourly containment entries by a fire watch to compensate for a failed smoke/heat detector in the containment. The permanently installed Resistance Temperature Detectors (RTD) in the general area of the failed detector will be monitored hourly instead. Monitoring the RTDs eliminates the need for containment entries for inoperable smoke/fire detectors. If inspections are deemed necessary in lieu of monitoring the RTDs, they will be performed at eight hour intervals rather than one hour. Performing inspections of containment on an hourly basis is impractical. By the time the entry is made, the inspection performed, and the exit from the sub-atmospheric containment completed, the next inspection would be due. Alternatively, inspecting the containment at a eight hour frequency does not significantly increase the probability of a fire going undetected.

It is reasonable for an alternate means of fire detection to be provided for the containment, since the risk of fire in containment is low. Welding and construction are seldom performed in containment during operations, and a fire watch is required for such activities. In addition, administrative controls require transient combustibles be removed from containment immediately after completion of the work. Fixed combustibles inside containment are very limited. As discussed previously, hourly entries into containment during operations are not practical. On consideration of these factors, monitoring the RTDs will provide an acceptable alternative to the installed smoke and heat detectors.

Section 3.21.B.1 will be changed to include "unless the inoperable instrument(s) is (are) in containment, then inspect the containment at least once per 8 hours or monitor the containment air temperature at least once per hour with the permanently installed RTDs."

The Bases of Section 3.21 will be changed to include "or an alternate indirect method of fire detection (permanently installed RTDs) in the containment."

10 CFR 50.92 SIGNIFICANT HAZARDS CONSIDERATION REVIEW

Virginia Electric and Power Company has reviewed the proposed changes against the criteria of 10 CFR 50.92 and has concluded that the changes as proposed do not pose a significant hazards consideration. Specifically, operation of the Surry Power Station in accordance with the proposed changes will not:

1. Involve a significant increase in the probability or consequences of an accident previously evaluated. Providing an alternate method (permanently installed RTDs) to monitor for fire in the containment other than a fire watch has not changed the physical plant nor altered system operation. Changing the required inspection frequency from one to eight hours as the alternate backup fire detection method for the containment does not significantly increase the probability of a fire going undetected in the containment. Therefore, this change in fire detection methods and inspection frequency will not significantly change the consequences or probability of any accident or malfunction.
2. Create the possibility of a new or different kind of accident from any accident previously evaluated. Because physical plant modifications are not being made and plant operations are not being changed, new accident precursors are not being generated. Thus, the possibility of a new or different kind of accident is not created.
3. Involve a significant reduction in a margin of safety. Adequate monitoring instrumentation still exists for fire detection in the containment using the permanently installed RTDs. As a backup to the RTDs, containment inspections every eight hours may be utilized. Performing an inspection every eight hours rather than an inspection every hour as a backup to the alternate method (RTDs) does not significantly impact the margin of safety as defined in the Technical Specifications.