

Proposed Change RTS-173
to the
Duane Arnold Energy Center
Technical Specifications

The holders of license DPR-49 for the Duane Arnold Energy Center propose to amend Appendix A (Technical Specifications) to said license by deleting the current pages and replacing them with the attached, new pages. A List of the Affected Pages is provided below.

List of Affected Pages

3.13-7
3.13-8
3.13-8a
3.13-10

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LIMITING CONDITION FOR OPERATION	SURVEILLANCE REQUIREMENT
<p data-bbox="245 217 618 250">E. <u>Fire Hose Stations</u></p> <p data-bbox="245 282 812 513">1. The fire hose stations in the following locations shall be operable whenever safety-related equipment in the areas protected by the fire hose stations is required to be operable.</p> <p data-bbox="326 541 618 573">(See Table 3.13-2)</p> <p data-bbox="245 1224 797 1548">2. With a hose station inoperable, restore the hose station to operable status within 1 hour or, establish a fire watch with portable extinguishing equipment until an additional hose can be routed from an operable hose station to the unprotected area.</p>	<p data-bbox="850 217 1224 250">E. <u>Fire Hose Stations</u></p> <p data-bbox="850 282 1435 347">1. Each fire hose station shall be verified to be operable:</p> <p data-bbox="850 379 1435 638">a. At least once every three months by visual inspection of the station to assure all equipment is available and the pressure in the standpipe is within limits, and that all valves in the flowpath to the hose station are open.</p> <p data-bbox="850 670 1435 832">b. At least once per 12 months by removing the hose for inspection and repacking and replacing all gaskets in the couplings that are degraded.</p> <p data-bbox="850 864 1435 993">c. At least once per three years partially open hose station valves to verify valve operability and no blockage.</p> <p data-bbox="850 1026 1435 1187">d. At least once per three years conduct a hose hydrostatic test at a pressure 50 psig greater than the maximum pressure available at that hose station.</p>

LIMITING CONDITION FOR OPERATION	SURVEILLANCE REQUIREMENT
<p>F. <u>Fire Barrier Penetration Fire Seals</u></p>	<p>F. <u>Fire Barrier Penetration Fire Seals</u></p>
<p>1. a. All fire barrier penetration seals protecting safety-related areas shall be intact whenever equipment within the affected area is required to be operable.</p>	<p>1. Fire barrier penetration seals shall be verified to be functional by: a. A visual inspection of approximately 35% of the fire barrier penetration seals once per operating cycle, with 100% of the fire barrier penetration seals visually inspected within a period of five years.</p>
<p>b. All fire doors protecting safety related areas shall be operable whenever safety related equipment within the door protected area is required to be operable.</p>	<p>b. A visual inspection of a fire barrier penetration seal following maintenance to verify that it has been returned to its original condition.</p>
<p>c. Fire protection raceway wrap and structural steel fireproofing shall be intact whenever equipment within the affected area is required to be operable.</p>	
<p>2. If Specification 3.13.F.1.a, 3.13.F.1.b, or 3.13.F.1.c cannot be met:</p>	<p>2. Fire doors shall be verified to be functional:</p>
<p>a. A continuous fire watch shall be established within 1 hour on at least one side of the penetration until work is completed and the penetration is resealed or,</p>	<p>a. At least once per operating cycle via visual inspection to verify its integrity and assure no blockage exists.</p>
<p>b. Verify the OPERABILITY of fire detectors on at least one side of the non-functional fire barrier and establish an hourly fire watch patrol or,</p>	<p>b. Prior to restoring a fire door to functional status following repairs or maintenance to verify it has been returned to its original condition.</p>
<p>c. Verify the OPERABILITY of fire detectors in the affected fire zone and establish an hourly fire watch patrol.</p>	

LIMITING CONDITION FOR OPERATION

SURVEILLANCE REQUIREMENT

3. Fire protection raceway wrap and structural steel fireproofing shall be verified to be functional by:
 - a. A visual inspection of approximately 35% of the fire protection raceway wrap and structural steel fireproofing at least once per operating cycle with 100% of the fire protection raceway wrap and structural steel fireproofing visually inspected within a period of five years.
 - b. Returning the fire protection raceway wrap and structural steel fireproofing to its original condition following repairs or maintenance.

Only hose stations and sprinkler/spray systems protecting safety related systems are required to be operable per the requirements of this Technical Specification. All other hose stations and sprinkler/spray systems are maintained per the regular plant maintenance and inspection procedures.

4.13 BASES

Periodic testing of the Fire Protection System will provide positive indication of its operability. If only one of the pumps supplying the Fire Protection System is operable, the pump that is operable will be checked immediately and daily thereafter to demonstrate operability. If the CO₂ System becomes inoperable in the cable spreading room, a continuous fire watch will be established within an hour.

Wet fire header flushing, spray header inspection for blockage, and nozzle inspection for blockage will prevent, detect, and remove buildup of sludge or other material to ensure continued operability.

Semiannual tests of heat and smoke detectors are in accordance with the NFPA code.

One detector in zones 1 or 3 (control auxiliary panel room) may be inoperable without making that fire detection zone inoperable due to the number of adjacent detectors in these zones providing coverage. All the fire detection equipment in zones 15 to 16 (essential switchgear rooms), zones 13, 14 and 17 (battery rooms), zones 21 and 22 (diesel-generator rooms) and zone 2 (control auxiliary panel room) are considered essential for adequate fire detection in these areas and are therefore all required to be operable. Up to three detectors for each zone in the cable spreading room (zones 5, 6, 7 and 8) can be inoperable without making that zone inoperable, as long as there are no adjacent detectors which are also inoperable. Adjacent detectors will provide coverage.

Smoke detectors will be tested "in-place" using inert gas applied by a pyrotronics type applicator which is accepted throughout the industrial fire protection industry for testing products of combustion detectors or by use of the MSA chemical smoke generators.

Circuits checks by initiation of end of the line or end of the branch detectors will more thoroughly test the parallel circuits than testing on a rotating detector basis. This test is not a detector test, but is a test to simulate the effect of electrical supervision as defined in the NFPA Code 72 A-18, Article 240.

Inspection of fire doors at least once per operating cycle will verify their integrity and thus their ability to maintain the integrity of the associated fire barrier and prevent fire propagation outside of the affected fire zone.

Inspection of fire protection raceway wrap and structural steel fireproofing will verify their ability to perform their intended design function which is to mitigate the affects of a fire in the affected fire zone.