

ATTACHMENT A-1

Beaver Valley Power Station, Unit No. 1
Proposed Technical Specification Change No. 215

The following is a list of the affected page:

Affected Page: 3/4 8-4

SURVEILLANCE REQUIREMENTS (Continued)

5. Verifying the diesel generator operates for ≥ 60 minutes while loaded to ≥ 2750 kw.
6. Verifying that the auto-connected loads to each diesel generator do not exceed the 2000 hour rating of 2850 kw.
7. Verifying that the automatic load sequence timer is OPERABLE with each load sequence time within $\pm 10\%$ of its required value.

c. Check for and remove accumulated water:

1. From the day tank, at least once per 31 days and after each operation of the diesel where the period of operation was greater than 1 hour, and
2. From the fuel oil storage tank, at least once per 92 days.

d. By sampling new fuel oil in accordance with ASTM D4057-81 prior to addition to the storage tanks and:

1. By verifying in accordance with the tests specified in ASTM D975-81 prior to addition to the storage tanks that the sample has:

a) An API Gravity of within 0.3 degrees at 60°F or a specific gravity of within 0.0016 at 60/60°F, when compared to the supplier's certificate or an absolute specific gravity at 60/60°F of greater than or equal to 0.83 but less than or equal to 0.89 or an API gravity at 60°F of greater than or equal to 27 degrees but less than or equal to 39 degrees,

b) A kinematic viscosity at 40°C of greater than or equal to 1.9 centistokes, but less than or equal to 4.1 centistokes, if gravity was not determined by comparison with the supplier's certification,

c) A flash point equal to or greater than 125°F, ~~and~~ ^{DELETE}

REPLACE WITH
INSERT "A"

~~(d) A clear and bright appearance with proper color when tested in accordance with ASTM D4176-82.~~

Attachment to A.C. Sources - Operating

INSERT "A"

- d) A water and sediment content of less than or equal to 0.05% when tested in accordance with ASTM D1796-83, and
- e) A total particulate contamination level of less than 10 mg/liter when tested in accordance with ASTM D2276-78, Method A.

ATTACHMENT A-2

Beaver Valley Power Station, Unit No. 2
Proposed Technical Specification Change No. 82

The following is a list of the affected page:

Affected Page: 3/4 8-4

ELECTRICAL POWER SYSTEMS

SURVEILLANCE REQUIREMENTS (Continued)

- 5. Verifying the diesel generator operates for at least 60 minutes while loaded to $\geq 4,238$ kw.
 - 6. Verifying that the auto-connected loads to each diesel generator do not exceed the 2000 hour rating of 4,535 kw.
 - 7. Verifying that the automatic load sequence timer is OPERABLE with each load sequence time within $\pm 10\%$ of its required value.
- c. Check for and remove accumulated water:
- 1. From the day tank, at least once per 31 days and after each operation of the diesel where the period of operation was greater than 1 hour, and
 - 2. From the fuel oil storage tank, at least once per 92 days.
- d. By sampling new fuel oil in accordance with ASTM D4057-81 prior to addition to the storage tanks and:
- 1. By verifying in accordance with the test specified in ASTM D975-81 prior to addition to the storage tanks that the sample has:
 - a) An API gravity of within 0.3 degrees at 60°F or a specific gravity of within 0.0016 at 60/60°F, when compared to the supplier's certificate or an absolute specific gravity at 60/60°F of greater than or equal to 0.83 but less than or equal to 0.89 or an API gravity at 60°F of greater than or equal to 27 degrees but less than or equal to 39 degrees,
 - b) A kinematic viscosity at 40°C of greater than or equal to 1.9 centistokes, but less than or equal to 4.1 centistokes, if gravity was not determined by comparison with the supplier's certification,
 - c) A flash point equal to or greater than 125°F, ~~and~~ ↓ DELETE
 - d) A clear and bright appearance with proper color when tested in accordance with ASTM D4176-82.
 - 2. By verifying within 31 days of obtaining the sample that the other properties specified in Table 1 of ASTM D975-81 are met when tested in accordance with ASTM D975-81 except that the analysis for sulfur may be performed in accordance with ASTM D1552-79 or ASTM D2622-82.

REPLACE WITH
INSERT "B"



(Proposed wording)

Attachment to A.C. Sources - Operating

INSERT "B"

- d) A water and sediment content of less than or equal to 0.05% when tested in accordance with ASTM D1796-83, and
- e) A total particulate contamination level of less than 10 mg/liter when tested in accordance with ASTM D2276-78, Method A.

ATTACHMENT B

Beaver Valley Power Station, Unit Nos. 1 and 2 Proposed Technical Specification Change No. 215 and 82 REVISION OF SURVEILLANCE REQUIREMENT 4.8.1.1.2.d.1.d

A. DESCRIPTION OF AMENDMENT REQUEST

The proposed amendment would revise Surveillance Requirement (SR) 4.8.1.1.2.d.1.d. The specific revision would replace the current wording with the following: d) A water and sediment content of less than or equal to 0.05% when tested in accordance with ASTM D1796-83, and e) A total particulate contamination level of less than 10 mg/liter when tested in accordance with ASTM D2276-78, Method A.

B. BACKGROUND

The current wording of SR 4.8.1.1.2.d.1.d requires that a sample of new fuel oil, prior to addition to storage, have a clear and bright appearance with proper color when tested in accordance with ASTM D4176-82. The clear and bright test is a visual determination that water and particulate matter are not present in the fuel oil. This test is accomplished by swirling the sample of fuel oil so a vortex is formed. Sediment and water will accumulate on the bottom of the container directly beneath the vortex. Very fine suspended solids or water will render the product hazy. The fuel oil must be of proper color while conducting this test. ASTM D4176-82 states that if an attempt is made to use this test method with fuels darker than ASTM 5, the presence of free water or particulate could be obscured and missed by the viewer. ASTM color darker than 5 means that at least 92% of the light is blocked by the sample. Stated in simpler terms, you cannot see through the sample.

The Clean Air Act Amendments of 1990, specifically Section 211(i), in part requires that all highway diesel fuel comply with the maximum sulfur content standard of 0.05% by weight effective October 1, 1993 (reference 55 FR 34120). The Act authorizes the EPA to require the use of a blue dye in high sulfur non-highway diesel fuel, and a red dye in low sulfur non-highway diesel fuel. To be in compliance with the dyeing requirements for high sulfur diesel fuel, three pounds of active ingredient per thousand barrels of diesel fuel is required before April 1, 1994. After this date, ten pounds of active ingredient per thousand barrels is required (reference 58 FR 63074). The low sulfur highway diesel fuel will be clear in color to allow it to be differentiated from non-highway diesel fuel which is red or blue in color. High sulfur highway diesel fuel will no longer be available. All emergency diesel generator high sulfur fuels will therefore be dyed, resulting in fuel with a greenish-blue appearance. Beaver Valley Power Station (BVPS) currently uses high sulfur oil to supply the emergency diesel generators.

The addition of the greenish-blue dye will make the determination that the fuel is clear and bright in accordance with SR 4.8.1.1.2.d.1.d potentially unachievable, especially after April 1, 1994, due to the inability to see through the fuel oil sample. To begin using the non-dyed low sulfur diesel fuel oil will require an evaluation to ensure that the low sulfur content will not have any detrimental effects on long term diesel operation.

C. JUSTIFICATION

The proposed revision to SR 4.8.1.1.2.d.1.d is necessary due to the presence of blue dye in the supplier's fuel oil, which will interfere with the performance of the clear and bright procedure, especially on new fuel oil purchased after April 1, 1994. The addition of the dye is mandated by EPA and IRS requirements to distinguish high sulfur non-highway diesel fuel from low sulfur highway undyed diesel fuel. These actions were a result of developments regarding 40 CFR 80.29, "Fuel and Fuel Additives." The proposed change will replace the clear and bright method with established methods for performing percent water/sediment and total particulate contamination which are consistent with the current requirements for stored fuel oil. Under the current surveillance requirements, the percent water/ sediment and total particulate contamination are required to be determined within 31 days of obtaining a sample (reference SR 4.8.1.1.2.d.2). The proposed surveillance requirements will require the determination of the presence of water/sediment and particulates in the fuel oil prior to its addition to the storage tanks.

The clear and bright test is a qualitative examination of the fuel oil since it consists of a visual determination that water/sediment and particulates are not present in the fuel oil. The proposed surveillance requirements will require a quantitative test which will determine the actual amount of water/sediment and particulates present in the fuel oil, thereby providing adequate assurance of the quality of the fuel oil prior to its addition.

The use of low sulfur highway diesel fuel which is not dyed could potentially be used to supply the emergency diesel generators. The clear and bright test can still be performed on the low sulfur highway diesel fuel oil. However, the use of a low sulfur fuel oil would require further evaluations as to its effects on our diesel performance. Our diesel operational experience has been with the use of high sulfur fuel oil.

Therefore, the proposed change will require the determination of water/sediment and particulates in new fuel oil, which has been dyed to meet EPA requirements, prior to addition to the storage tanks. The new surveillance requirements will provide a

quantitative determination of water/sediment and particulates in new fuel prior to addition to the storage tanks. This determination is currently performed using a visual, qualitative measure of these fuel oil properties. The proposed change will therefore provide adequate assurance of the quality of the fuel oil prior to its addition to the storage tanks.

D. SAFETY ANALYSIS

The proposed revision to SR 4.8.1.1.2.d.1.d does not affect the safety of the plant. The determination of the presence of water/sediment and particulates in new fuel oil will still be performed prior to the addition of new fuel to the storage tanks. The current surveillance requirement only requires a qualitative examination of new fuel oil prior to addition to the storage tank. Within 31 days of sampling new fuel oil, a quantitative examination of new fuel oil is then performed. The proposed surveillance requirements will eliminate the qualitative examination and require a quantitative examination with the same acceptance criteria as the current 31 day requirement for new fuel oil prior to addition to the storage tanks.

Therefore, the proposed change is considered safe based on the fact that the proposed change will ensure that the percent water/sediment and total particulate contamination are within acceptable limits prior to addition to the storage tanks. The fuel oil will therefore be maintained at the already existing acceptable limits to ensure that it will not have any detrimental effects of the diesel generator operation.

E. NO SIGNIFICANT HAZARDS EVALUATION

The no significant hazard considerations involved with the proposed amendment have been evaluated, focusing on the three standards set forth in 10 CFR 50.92(c) as quoted below:

The Commission may make a final determination, pursuant to the procedures in paragraph 50.91, that a proposed amendment to an operating license for a facility licensed under paragraph 50.21(b) or paragraph 50.22 or for a testing facility involves no significant hazards consideration, if operation of the facility in accordance with the proposed amendment would not:

- (1) Involve a significant increase in the probability or consequences of an accident previously evaluated; or
- (2) Create the possibility of a new or different kind of accident from any accident previously evaluated; or

(3) Involve a significant reduction in a margin of safety.

The following evaluation is provided for the no significant hazards consideration standards.

1. Does the change involve a significant increase in the probability or consequences of an accident previously evaluated?

The proposed change does not involve a significant increase in the probability or consequences of an accident previously evaluated since the diesel generator availability and reliability is not being changed. The quantitative acceptance criteria for new fuel oil is not being changed. Diesel generator performance will therefore not be changed due to the proposed revision to SR 4.8.1.2.d.1.d. The diesel generator will continue to provide sufficient electrical power to ESF systems. The ESF systems will continue to function, as assumed in the safety analyses, to ensure that the fuel, reactor coolant system, and containment design limits are not exceeded.

Therefore, this change will not increase the probability or consequences of an accident previously evaluated due to the continued availability and reliability of the emergency diesel power source.

2. Does the change create the possibility of a new or different kind of accident from any accident previously evaluated?

The proposed change does not alter the method of operating the plant. This change will continue to ensure that the addition of new fuel oil complies with accepted standards regarding fuel oil quality. Since design requirements continue to be met and the integrity of the reactor coolant system pressure boundary is not challenged, no new failure mode has been created. As a result, an accident which is different than any already evaluated in the Updated Final Safety Analysis Report will not be created due to this change.

Therefore, the proposed change does not create the possibility of a new or different kind of accident from any accident previously evaluated.

3. Does the change involve a significant reduction in a margin of safety?

The margin of safety is not reduced because the emergency diesel generators will continue to provide sufficient capacity, capability, redundancy, and reliability to ensure availability of necessary power to ESF systems. The ESF

systems will continue to function, as assumed in the safety analyses, to ensure that the fuel, reactor coolant systems, and containment design limits are not exceeded. The replacement of the clear and bright qualitative examination with the proposed quantitative test to determine the actual water/sediment and particulates will ensure that new fuel oil meets the required limits for these properties prior to addition to the storage tank, therefore assuring that the quality of the stored fuel is unaffected by the addition of new fuel.

Therefore, this proposed change does not involve a significant reduction in a margin of safety.

F. NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION

Based on the considerations expressed above, it is concluded that the activities associated with this license amendment request satisfies the no significant hazards consideration standards of 10 CFR 50.92(c) and, accordingly, a no significant hazards consideration finding is justified.

ATTACHMENT C-1

Beaver Valley Power Station, Unit No. 1
Proposed Technical Specification Change No. 215

Applicable Typed Pages

ATTACHMENT TO LICENSE AMENDMENT NO. _____

FACILITY OPERATING LICENSE NO. DPR-66

DOCKET NO. 50-334

Replace the following page of Appendix A, Technical Specifications, with the enclosed page as indicated. The revised page is identified by amendment number and contains vertical lines indicating the areas of change.

Remove

3/4 8-4

Insert

3/4 8-4

(Proposed Wording)

SURVEILLANCE REQUIREMENTS (Continued)

5. Verifying the diesel generator operates for ≥ 60 minutes while loaded to ≥ 2750 kw.
 6. Verifying that the auto-connected loads to each diesel generator do not exceed the 2000 hour rating of 2850 kw.
 7. Verifying that the automatic load sequence timer is OPERABLE with each load sequence time within $\pm 10\%$ of its required value.
- c. Check for and remove accumulated water:
1. From the day tank, at least once per 31 days and after each operation of the diesel where the period of operation was greater than 1 hour, and
 2. From the fuel oil storage tank, at least once per 92 days.
- d. By sampling new fuel oil in accordance with ASTM D4057-81 prior to addition to the storage tanks and:
1. By verifying in accordance with the tests specified in ASTM D975-81 prior to addition to the storage tanks that the sample has:
 - a) An API Gravity of within 0.3 degrees at 60°F or a specific gravity of within 0.0016 at 60/60°F, when compared to the supplier's certificate or an absolute specific gravity at 60/60°F of greater than or equal to 0.83 but less than or equal to 0.89 or an API gravity at 60°F of greater than or equal to 27 degrees but less than or equal to 39 degrees,
 - b) A kinematic viscosity at 40°C of greater than or equal to 1.9 centistokes, but less than or equal to 4.1 centistokes, if gravity was not determined by comparison with the supplier's certification,
 - c) A flash point equal to or greater than 125°F,
 - d) A water and sediment content of less than or equal to 0.05% when tested in accordance with ASTM D1796-83, and
 - e) A total particulate contamination level of less than 10 mg/liter when tested in accordance with ASTM D2276-78, Method A.

ATTACHMENT C-2

Beaver Valley Power Station, Unit No. 2
Proposed Technical Specification Change No. 82

Applicable Typed Pages

ATTACHMENT TO LICENSE AMENDMENT NO.

FACILITY OPERATING LICENSE NO. NPF-73

DOCKET NO. 50-412

Replace the following pages of Appendix A, Technical Specifications, with the enclosed pages as indicated. The revised pages are identified by amendment number and contain vertical lines indicating the areas of change.

Remove

3/4 8-4
3/4 8-5

Insert

3/4 8-4
3/4 8-5

(Proposed Wording)

SURVEILLANCE REQUIREMENTS (Continued)

5. Verifying the diesel generator operates for at least 60 minutes while loaded to $\geq 4,238$ kw.
 6. Verifying that the auto-connected loads to each diesel generator do not exceed the 2000 hour rating of 4,535 kw.
 7. Verifying that the automatic load sequence timer is OPERABLE with each load sequence time within $\pm 10\%$ of its required value.
- c. Check for and remove accumulated water:
1. From the day tank, at least once per 31 days and after each operation of the diesel where the period of operation was greater than 1 hour, and
 2. From the fuel oil storage tank, at least once per 92 days.
- d. By sampling new fuel oil in accordance with ASTM D4057-81 prior to addition to the storage tanks and:
1. By verifying in accordance with the test specified in ASTM D975-81 prior to addition to the storage tanks that the sample has:
 - a) An API Gravity of within 0.3 degrees at 60°F or a specific gravity of within 0.0016 at 60/60°F, when compared to the supplier's certificate or an absolute specific gravity at 60/60°F of greater than or equal to 0.83 but less than or equal to 0.89 or an API gravity at 60°F of greater than or equal to 27 degrees but less than or equal to 39 degrees,
 - b) A kinematic viscosity at 40°C of greater than or equal to 1.9 centistokes, but less than or equal to 4.1 centistokes, if gravity was not determined by comparison with the supplier's certification,
 - c) A flash point equal to or greater than 125°F,
 - d) A water and sediment content of less than or equal to 0.05% when tested in accordance with ASTM D1796-83, and

SURVEILLANCE REQUIREMENTS (Continued)

- e) A total particulate contamination level of less than 10 mg/liter when tested in accordance with ASTM D2276-78, Method A.
2. By verifying within 31 days of obtaining the sample that the other properties specified in Table 1 of ASTM D975-81 are met when tested in accordance with ASTM D975-81 except that the analysis for sulfur may be performed in accordance with ASTM D1552-79 or ASTM D2622-82.
- e) At least once every 31 days by obtaining a sample of fuel oil from the storage tanks and day tanks in accordance with ASTM D2276-78, and verifying that total particulate contamination is less than 10 mg/liter when checked in accordance with ASTM D2276-78, Method A.
 - f) At least once per 10 years or after any modifications which could affect diesel generator interdependence by starting** both diesel generators simultaneously, during shutdown, and verifying that both diesel generators accelerate to at least 514 rpm in less than or equal to 10 seconds.
 - g) At least once per 10 years by:
 - 1) Draining each main fuel oil storage tank, removing the accumulated sediment, and cleaning the tank using a sodium hypochlorite solution or other appropriate cleaning solution, and
 - 2) Performing a pressure test, of those portions of the diesel fuel oil system designed to Section III, subsection ND of the ASME Code, at a test pressure equal to 110% of the system design pressure.

** This test shall be conducted in accordance with the manufacturer's recommendations regarding engine prelube and warmup procedures, and as applicable regarding loading recommendations.