2.0 LIMITING CONDITIONS FOR OPERATION

2.7 Electrical Systems

Applicability

Applies to the availability of electrical power for the operation of plant components.

Objective

To define those conditions of electrical power availability necessary to provide for safe reactor operation and the continuing availability of engineered safety features.

Specifications

(1) Minimum Requirements

The reactor coolant shall not be heated or maintained at temperatures above 300°F unless the following electrical systems are operable:

a. Unit auxiliary power transformers T1A-1 or -2 (4,160 V).

b. House service transformers T1A-3 and 4 (4,160 V).

c. 4,160 V engineered safety feature buses 1A3 and 1A4.

d. 4,160 V/480 V Transformers T1B-3A, T1B-3B, T1B-3C, T1B-4A, T1B-4B, T1B-4C.

e. 480 V distribution buses 1B3A, 1B3[illegible]B4A, 1B3B, 1B3B-4B, 1B4B, 1B3C, 1B3C-4C, 1B4C.

f. MCC No. 3A1, 3B1, 3A2, 3C1, 3C2, 4A1, 4A2, 4C1 and 4C2.

g. 125 V d-c buses No. 1 and 2 (Panels EE-8F and EE-8G).

h. 125 V d-c distribution panels AI-41A and AI-41B.

i. 120V a-c instrument buses A, B, C, and D (Panels AI-40A, B, C and D).

j. 120V a-c instrument panels AI-42A and AI-42B.

k. Station batteries No. 1 and 2 (EE-8A and EE-8B) including one battery charger on each 125V d-c bus No. 1 and 2 (EE-8F and EE-8G).

l. Both diesel generators, each with an engine mounted tank and an auxiliary tank containing a combined minimum volume of 550 gallons, and a minimum of 16,000 gallons of fuel in the underground storage tank.

(2) Modification of Minimum Requirements

The minimum requirements may be modified to the extent that one of the following conditions will be allowed after the reactor coolant has been heated above 300°F. However, the reactor shall not be made critical unless all minimum requirements are met. If any of the provisions of these exceptions are violated, the reactor shall be placed in a hot shutdown condition within the following 12 hours. If the violation is not corrected within an additional 12 hours, the reactor shall be placed in a cold shutdown condition within an additional 24 hours.

a. Both unit auxiliary power transformers T1A-1 and -2 (4.16 kV) may be inoperable for up to 24 hours provided the operability of both diesel generators is demonstrated immediately.

b. Either house service transformer T1A-3 or T1A-4 (4.16kV) may be inoperable for up to 7 days provided the operability of the diesel generator associated with the inoperable transformer is immediately verified. Notification by telephone shall be made to the Regional Administrator within 4 hours.

Continued operation beyond 7 days is permissible provided a report is sent to the NRC within 48 hours outlining the plans for prompt restoration of the transformer and the additional precautions to be taken while the transformer is out of service, and until notified differently by the NRC.

c. Both house service transformers T1A-3 and T1A-4 (4.16kV) may be inoperable for up to 72 hours provided the operability of both diesel generators is immediately verified. The loss of the 161kV incoming line renders both transformers inoperable. Notification by telephone shall be made to the Regional Administrator within 4 hours.

Continued operation beyond 72 hours is permissible provided a report is sent to the NRC within 48 hours outlining the plans for prompt restoration of the transformers and the additional precautions to be taken while the transformers are out of service, and until notified differently by the NRC.

d. Either one of the 4.16 kV engineered safeguards buses, 1A3 or 1A4 may be inoperable for up to 8 hours provided the operability of the diesel generator associated with the operable bus is demonstrated immediately and there are no inoperable engineered safeguards components associated with the operable bus.

e. One of each group of 4160 V/480 V Transformers (T1B-3A or 4A), (T1B-3B or 4B), and (T1B-3C or 4C) may be inoperable for up to 8 hours provided there are no inoperable engineered safeguards components which are redundant to components on the inoperable transformer.

f. One of the 480 V distribution buses connected to bus 1A3 or connected to bus 1A4 may be inoperable for up to 8 hours provided there are no inoperable safeguards components which are redundant to components on the inoperable bus.

g. Either Group of MCC No.'s (3A1, 3B1, 3A2, 3C1, 3C2,) or (4A1, 4A2, 4C1, 4C2) may be inoperable for up to 8 hours provided there are no inoperable safeguards components which are redundant to components on the inoperable MCC. MCC 3C1 may be inoperable in excess of 8 hours if battery chargers No. 1 and No. 2 are operable.

h. One of the four 120V a-c instrument buses (A, B, C or D) may be inoperable for 8 hours provided the reactor protective and engineered safeguards systems instrument channels supplied by the remaining three buses are all operable.

i. Two battery chargers may be inoperable for up to 8 hours provided battery charger No. 1 (EE-8C) or No. 2 (EE-8D) is operable.

j. Either one of the emergency diesel generators (DG-1 or DG-2) may be inoperable for up to seven days (total for both) during any month, provided the other diesel generator is started to verify operability, shutdown and controls are left in the automatic mode and there are no inoperable engineered safeguards components associated with the operable diesel generator.

k. Island buses 1B3A-4A, 1B3B-4B, and 1B3C-4C may be inoperable for up to 8 hours provided there are no inoperable safeguards components which are redundant to components on the inoperable bus(es).

l. Either one of the 125V d-c buses No. 1 or 2 (Panels EE-8F or EE-8G) may be inoperable for up to 8 hours.

m. Either one of the 125V d-c distribution panels AI-41A or AI-41B may be inoperable for up to 8 hours.

n. Either one of the 120V a-c instrument panels AI-42A or AI-42B may be inoperable for up to 8 hours.

Basis

The normal source of auxiliary power with the plant at power for the safeguards buses is from the house service power transformers being fed from the 161 kV incoming line with on-site emergency power from either one of two diesel generators and off-site standby power via the unit auxiliary transformers.(1) The loss of the 161kV incoming line renders the house service transformers (T1A-3 and T1A-4) inoperable in that the transformers cannot supply power to the 4.16kV safeguards buses 1A3 and 1A4.

The two emergency diesel generators on site do not require outside power for start up or operation.

Upon loss of normal and standby power sources, the 4.16 kV buses 1A3 and 1A4 are energized from the diesel generators. Bus load shedding, transfer to the diesel generator and pickup of critical loads are carried out automatically.(2)

When the turbine generator is out of service for an extended period, the generator can be isolated by opening motor operated disconnect switch DS-T1 in the bus between the generator and the main transformer, allowing the main transformer and the unit auxiliary power transformers (T1A-1 and T1A-2) to be returned to service.(3) The auxiliary power transformers are not considered inoperable during these normal plant startup/shutdown realignments.

Equipment served by 4.16 kV and 480 V auxiliary buses and MCC's is arranged so that loss of an entire 4.16 kV bus does not compromise safety of the plant during DBA conditions. For example, if 4.16 kV bus 1A3 is lost, two raw water pumps, one low pressure safety injection pump, two high pressure safety injection pumps, one auxiliary feedwater pump, two component cooling water pumps, one containment spray pump and two containment air fans are lost. This leaves two raw water pumps, one low pressure safety injection pump, one high pressure safety injection pump, one component cooling water pump, two containment spray pumps and two containment air fans which is more than sufficient to control containment pressure below the design value during the DBA.

The electrical system equipment is arranged so that no single failure can inactivate enough engineered safeguards to jeopardize the plant safety. The 480 V safeguards are arranged on nine bus sections. The 4.16 kV safeguards are supplied from two buses.

The total fuel oil engine mounted tank capacity of 550 gallons on each diesel assures considered more than 2.5 hours running time (maximum rated loading) is available before transfer of fuel oil from the 18,000 gallon underground storage tank is mandatory. Two 13 gpm fuel oil transfer pumps per diesel, each being fed from the diesel it is associated with, are available for transferring fuel oil from the storage tank. The minimum 16,000 gallons of fuel oil in the storage tank, in addition to the engine-mounted tanks will provide diesel operation under the required loading conditions for a minimum period of 3.5 days should only one diesel be in operation. It is considered incredible not to be able to procure fuel oil from one of several sources in the vicinity of the Fort Calhoun Station in less than three days under the worst of weather conditions.

One battery charger on each battery shall be operating so that the batteries will always be at full charge; this ensures that adequate d-c power will be available for all emergency uses. Each battery has one battery charger permanently connected with a third charger capable of being connected to either battery bus. The chargers are each rated for 400 amperes at 130 volts. Following a DBA the batteries and the charger will handle all required loads. Each of the reactor protective system instrumentation channels is supplied by one of the a-c instrument buses. The removal of one of the a-c instrument buses is permitted as the 2-of-4 logic may be manually changed to a 2-of-3 logic without compromising safety.

The engineered safeguards instrument channels use a-c instrument buses (one redundant bus for each channel) and d-c buses (one redundant bus for each logic circuit). The removal of one of the a-c instrument buses is permitted as the two of four logic automatically becomes a two of three logic.

References

(1) USAR Section 8.3.1.2
(2) USAR Section 8.4.1
(3) USAR Section 8.2.2

TABLE 2-10

POST-ACCIDENT MONITORING INSTRUMENTATION OPERATING LIMITS

	Instrument	Minimum Operable Channels	Action
1.	Containment Wide Range Radiation Monitors (RM-091A & B)	2	(a)
2.	Wide Range Noble Gas Stack Monitor		
	RM-063L (Noble Gas Portion Only)	1	(a)
	RM-063M (Noble Gas Portion Only)	1	(a)
	RM-063H (Noble Gas Portion Only)	1	(a)
3.	Main Steam Line Radiation Monitor (RM-064)	1	(a)
4.	Containment Hydrogen Monitor (VA-81A & B)	2	(b)(c)
5.	Containment Water Level		
	Narrow Range (LT-599 & LT-600)	1	(d)
	Wide Range (LT-387 & LT-388)	2	(b)(c)
6.	Containment Wide Range Pressure	2	(b)(c)
7.	Reactor Coolant System Subcooled Margin Monitor	2	(e)(f)
8.	Core Exit Thermocouples (i)	2/Core Quadrant	(g)(h)
9.	Reactor Vessel Level (HJTC) (j)	2	(k)(l)

(a) With the number of OPERABLE channels less than required by the minimum channels operable requirements, initiate the pre-planned alternate method of monitoring the appropriate parameter(s) within 72 hours, and

1. either restore the inoperable channel(s) to OPERABLE status within 7 days of the event, or

2. prepare and submit a special report to the Commission pursuant to specification 5.9.3 within 14 days following the event outlining the action taken, the cause of the inoperability, and the plans and schedules for restoring the system to OPERABLE status.

(b) With one channel inoperable, restore the inoperable monitor to OPERABLE status within 30 days or be in at least HOT SHUTDOWN within the next 12 hours.

TABLE 2-10 (Continued)

POST-ACCIDENT MONITORING INSTRUMENTATION OPERATING LIMITS

(c) With both channels inoperable, restore at least one channel to OPERABLE status within 72 hours or be in at least HOT SHUTDOWN within the next 12 hours.

(d) With the number of OPERABLE channels less than required by the minimum channels operable requirements, operation may continue until the next cold shutdown, at which time the required channel(s) shall be made operable.

(e) With the number of OPERABLE channels one less than the minimum channels operable requirement, either

1. restore the inoperable channel(s) to OPERABLE status within 7 days, or
2. initiate an alternate means of monitoring the subcooled margin, or
3. be in at least HOT SHUTDOWN within the next 12 hours.

(f) With both channels inoperable,

1. restore the inoperable channel(s) to OPERABLE status within 48 hours, or
2. initiate an alternate means of monitoring the subcooled margin, or
3. be in at least HOT SHUTDOWN within the next 12 hours.

(g) With the number of OPERABLE Core Exit Thermocouples per core quadrant one less than the minimum operable requirement, either restore the inoperable Core Exit Thermocouple(s) to OPERABLE status within 7 days, or be in at least HOT SHUTDOWN within the next 12 hours.

(h) With all Core Exit Thermocouples within a core quadrant inoperable, either restore the inoperable Core Exit Thermocouple(s) to OPERABLE status within 48 hours or be in at least HOT SHUTDOWN within the next 12 hours.

(i) With the number of OPERABLE Core Exit Thermocouples less than the four per core quadrant required by NUREG-0737, either restore to at least four OPERABLE Core Exit Thermocouples per core quadrant within seven days of discovery of loss of operability, or prepare and submit a special report to the Commission pursuant to Specification 5.9.3 within 30 days, outlining the actions taken, the cause of the inoperability and the plans for restoring the inoperable Core Exit Thermocouple(s) to OPERABLE status.

(j) A channel is eight sensors in a probe. A channel is OPERABLE if four or more sensors, two or more in the upper four and two or more in the lower four, are OPERABLE.

2.0 LIMITING CONDITIONS FOR OPERATION

2.7 Electrical Systems

Applicability

Applies to the availability of electrical power for the operation of plant components.

Objective

To define those conditions of electrical power availability necessary to provide for safe reactor operation and the continuing availability of engineered safety features.

Specifications

(1) Minimum Requirements

The reactor coolant shall not be heated ~~up~~ or maintained at temperatures above 300°F unless the following electrical systems are operable:

a. Unit auxiliary power transformers T1A-1 or -2 (4,160 V).

b. House service transformers T1A-3 and 4 (4,160 V).

c. 4,160 V engineered safety feature buses 1A3 and 1A4.

d. 4,160 V/480 V Transformers T1B-3A, T1B-3B, T1B-3C, T1B-4A, T1B-4B, T1B-4C.

e. 480 V distribution buses 1B3A, 1B3A-4A, 1B4A, 1B3B, 1B3B-4B, 1B4B, 1B3C, 1B3C-4C, 1B4C.

f. MCC No. 3A1, 3B1, 3A2, 3C1, 3C2, 4A1, 4A2, 4C1 and 4C2.

g. 125 V d-c buses No. 1 and 2 (Panels EE-8F and EE-8G).

h. 125 V d-c distribution panels A1I-41A and A1I-41B.

i. 120V a-c ~~Four~~ instrument ~~a-c~~ buses A, B, C, and D (Panels AI-40A, B, C and D).

j. 120V a-c instrument panels AI-42A and AI-42B.

k. ~~Two~~ Station batteries No. 1 and 2 (EE-8A and EE-8B) including ~~at least~~ one battery charger on each 125V d-c ~~D.C.~~ bus No. 1 and 2 (EE-8F and EE-8G).

l. Both diesel generators, each with an ~~full~~ engine ~~base~~-mounted day tank and an auxiliary tank containing a combined minimum volume of 550 gallons, and a minimum of 16,000 gallons of fuel in the underground storage tank.

(2) Modification of Minimum Requirements

The minimum requirements may be modified to the extent that one of the following conditions will be allowed after the reactor coolant has been heated above 300°F ~~made critical~~. However, the reactor shall not be made critical unless all minimum requirements are met. If any of the provisions of these exceptions are violated, the reactor shall be placed in a hot shutdown condition within the following 12 hours. If the violation is not corrected within an additional 12 ~~24~~ hours, the reactor shall be placed in a cold shutdown condition within an additional 24 hours.

a. Both unit auxiliary power transformers T~~1~~1A-1 and -2 (4.16 kV) may be inoperable for up to 24 hours provided the operability of both diesel generators is demonstrated immediately.

b. ~~House service transformers T1A-3 or T1A-4 (4.16 kV) may be inoperable for up to one week. House service transformers T1A-3 and -4 (4.16 kV) may be inoperable for up to 24 hours provided the operability of both diesel generators is demonstrated immediately, and the NRC is notified immediately and a report is submitted to the NRC as specified in Section 5.6 with an outline of the plans for prompt restoration of off-site power and the additional precautions to be taken while the transformers are out of service.~~

Either house service transformer T1A-3 or T1A-4 (4.16kV) may be inoperable for up to 7 days provided the operability of the diesel generator associated with the inoperable transformer is immediately verified. Notification by telephone shall be made to the Regional Administrator within 4 hours.

Continued operation beyond 7 days is permissible provided a report is sent to the NRC within 48 hours outlining the plans for prompt restoration of the transformer and the additional precautions to be taken while the transformer is out of service, and until notified differently by the NRC.

c. Both house service transformers T1A-3 and T1A-4 (4.16kV) may be inoperable for up to 72 hours provided the operability of both diesel generators is immediately verified. The loss of the 161kV incoming line renders both transformers inoperable. Notification by telephone shall be made to the Regional Administrator within 4 hours.

Continued operation beyond 72 hours is permissible provided a report is sent to the NRC within 48 hours outlining the plans for prompt restoration of the transformers and the additional precautions to be taken while the transformers are out of service, and until notified differently by the NRC.

e. d. Either one of the 4.16 kV engineered safeguards buses, 1A3 or 1A4 may be inoperable for up to 8 hours provided the operability of the diesel generator associated with the operable bus is demonstrated immediately and there are no inoperable engineered safeguards components associated with the operable bus.

d. e. One of each group of 4160 V/480 V Transformers (TH1B-3A or 4A), (TH1B-3B or 4B), and (TH1B-3C or 4C) may be inoperable for up to 8 hours provided there are no inoperable engineered safeguards components ~~associated with the operable transformers~~ which are redundant to components on the inoperable transformer.

e. f. One of the 480 V distribution buses connected to bus 1A3 or connected to bus 1A4 may be inoperable for up to 8 hours provided there are no inoperable safeguards components ~~associated with the operable bus,~~ which are redundant to components on the inoperable bus.

f. g. Either Group of MCC No.'s (3A1, 3B1, 3A2, 3C1, 3C2,) or (4A1, 4A2, 4C1, 4C2) may be inoperable for up to 8 hours provided there are no inoperable safeguards components ~~associated with the operable MCC's,~~ which are redundant to components on the inoperable MCC. MCC 3C1 may be inoperable in excess of 8 hours if battery chargers No. 1 and No. 2 are operable.

g. h. One of the four 120V a-c instrument buses (____ A, B, C or D) may be inoperable for 8 hours provided the reactor protective and engineered safeguards systems instrument channels supplied by the remaining three buses are all operable.

h. i. Two battery chargers may be inoperable for up to 8 hours provided battery charger No. 1 (EE-8C) or No. 2 (EE-8D) is operable.

i. j. Either one of the emergency diesel generators (DG-1 or DG-2) may be inoperable for up to seven days (total for both) during any month, provided the other diesel generator is started to verify operability, shutdown and controls are left in the automatic mode and there are no inoperable engineered safeguards components associated with the operable diesel generator.

j. k. Island buses 1B3A-4A, 1B3B-4B, and 1B3C-4C may be inoperable for up to 8 hours provided there are no inoperable safeguards components ~~associated with the operable bus~~ which are redundant to components on the inoperable bus(es).

k. l. Either one of the 125V d-c ~~DC~~ buses No. 1 or 2 (Panels EE-8F or ~~and~~ EE-8G) may be inoperable for up to 8 hours.

l. m. Either one of the 125V d-c ~~DC~~ distribution panels AI-41A or ~~and~~ AI-41B may be inoperable for up to 8 hours.

~~m.~~ n. Either one of the 120V a-c ~~AC~~ instrument panels AI-42A or AI-42B may be inoperable for up to 8 hours.

~~n. The 161 kV transmission line may be out of service and unit operation may continue or the reactor may be restarted from a hot shutdown condition if (i) operability of the remaining source is immediately verified and (ii) immediate notification is made by telephone or telegraph to the Director of the NRC Regional Office in Arlington, Texas of the loss and of the plans to restore the electric power system to its full capability.~~

Basis

The normal source of auxiliary power with the plant at power for the safeguards buses is from the house service power transformers being fed from the 161 kV incoming line with on-site emergency power from either one of two diesel generators and off-site standby power via the unit auxiliary transformers.[1] The loss of the 161kV incoming line renders the house service transformers (T1A-3 and T1A-4) inoperable in that the transformers cannot supply power to the 4.16kV safeguards buses 1A3 and 1A4.

The two emergency diesel generators on site do not require outside power for start up or operation.

Upon loss of normal and standby power sources, the 4.16 kV buses 1A3 and 1A4 are energized from the diesel generators. Bus load shedding, transfer to the diesel generator and pickup of critical loads are carried out automatically.[2]

When the turbine generator is out of service for an extended period, the generator can be isolated by opening motor operated disconnect switch DS-T1 in the bus between the generator and the main transformer, allowing the main transformer and the unit auxiliary power transformers (T1A-1 and T1A-2) to be returned to service.[3] The auxiliary power transformers are not considered inoperable during these normal plant startup/shutdown realignments.

Equipment served by 4.16 kV and 480 V auxiliary buses and MCC's is arranged so that loss of an entire 4.16 kV bus does not compromise safety of the plant during DBA conditions. For example, if 4.16 kV bus 1A3 is lost, two raw water pumps, one low pressure safety injection pump, ~~one~~ two high pressure safety injection pumps, one auxiliary feedwater pump, two component cooling water pumps, one containment spray pumps and two containment air fans are lost. This leaves two raw water pumps, one low pressure safety injection pumps, ~~two~~ one high pressure safety injection pumps, one component cooling water pump, ~~one~~ two containment spray pumps and two containment air fans which is more than sufficient to control containment pressure below the design value during the DBA.

The electrical system equipment is arranged so that no single failure can inactivate enough engineered safeguards to jeopardize the plant safety. The 480 V safeguards are arranged on nine bus sections. The 4.16 kV safeguards are supplied from two buses.

The total fuel oil engine ~~base~~ mounted tank capacity of 550 gallons on each diesel assures ~~is considered~~ more than ~~adequate since approximately 5~~ 2.5 hours running time (~~worst~~ maximum rated ~~case~~ loading) is available before transfer of fuel oil from the 18,000 gallon underground storage tank is mandatory. Two 13 gpm ~~diesel~~ fuel oil transfer pumps per diesel, ~~with~~ each being fed from the diesel it is associated with, are available for transferring fuel oil from the storage tank ~~to the day tank~~. The minimum 16,000 gallons of fuel oil in the storage tank, in addition to the ~~day~~ engine mounted tanks will provide diesel operation under the required loading conditions for a minimum period of ~~7~~ 3.5 days should only one diesel be in operation. It is considered incredible not to be able to ~~secure~~ procure fuel oil from one of several sources in the vicinity of the Fort Calhoun Station ~~Omaha~~ in less than three days under the worst of weather conditions.

One battery charger on each battery shall be operating so that the batteries will always be at full charge; this ensures that adequate d-c power will be ~~avilible~~ available for all emergency uses. Each battery has one battery charger permanently connected with a third charger capable of being connected to either battery bus. The chargers are each rated for ~~200~~ 400 amperes at 130 volts. ~~Except for the first minute~~ Following a DBA ~~during which~~ the batteries and the charger ~~accommodate all the load, the capacity of the battery charger~~ will handle allrequired loads. Each of the reactor protective system ~~channels~~ instrumentation channels is supplied by one of the a-c instrument buses. The removal of one of the a-c instrument buses is permitted as the 2-of-4 logic may be manually changed to a 2-of-3 logic without compromising safety.

The engineered safeguards instrument channels use a-c instrument buses (one redundant bus for each channel) and d-c buses (one redundant bus for each logic circuit). The removal of one of the a-c instrument buses is permitted as the two of four logic automatically becomes a two of three logic.

References

(1) ~~FSAR~~, USAR Section 8.3.1.2
(2) ~~FSAR~~, USAR Section 8.4.1
(3) ~~FSAR~~, USAR Section 8.2.2

TABLE 2-10

POST-ACCIDENT MONITORING INSTRUMENTATION OPERATING LIMITS

	Instrument	Minimum Operable Channels	Action
1.	Containment Wide Range Radiation Monitors (RM-091A & B)	2	(a)
2.	Wide Range Noble Gas Stack Monitor		
	RM-063L (Noble Gas Portion Only)	1	(a)
	RM-063M (Noble Gas Portion Only)	1	(a)
	RM-063H (Noble Gas Portion Only)	1	(a)
3.	Main Steam Line Radiation Monitor (RM-064)	1	(a)
4.	Containment Hydrogen Monitor (VA-81A & B)	2	(b)(c)
5.	Containment Water Level		
	Narrow Range (LT-~~559~~ 599 & LT-600)	1	(d)
	Wide Range (LT-387 & LT-388)	2	(b)(c)
6.	Containment Wide Range Pressure	2	(b)(c)
7.	Reactor Coolant System Subcooled Margin Monitor	2	(e)(f)
8.	Core Exit Thermocouples (i)	2/Core Quadrant	(g)(h)
9.	Reactor Vessel Level (HJTC) (j)	2	(k)(l)

(a) With the number of OPERABLE channels less than required by the minimum channels operable requirements, initiate the pre-planned alternate method of monitoring the appropriate parameter(s) within 72 hours, and

1. either restore the inoperable channel(s) to OPERABLE status within 7 days of the event, or

2. prepare and submit a special report to the Commission pursuant to specification 5.9.3 within 14 days following the event outlining the action taken, the cause of the inoperability, and the plans and schedules for restoring the system to OPERABLE status.

(b) With one channel inoperable, restore the inoperable monitor to OPERABLE status within 30 days or be in at least HOT SHUTDOWN within the next 12 hours.

(c) With ~~not~~ both channels inoperable, restore at least one channel to OPERABLE status within 72 hours or be in at least HOT SHUTDOWN within the next 12 hours.

(d) With the number of OPERABLE channels less than required by the minimum channels operable requirements, operation may continue until the next cold shutdown, at which time the required channel(s) shall be made operable.

(e) With the number of OPERABLE channels one less than the minimum channels operable requirement, either

1. restore the inoperable channel(s) to OPERABLE status within 7 days, or

2. initiate an alternate means of monitoring the subcooled margin, or

3. be in at least HOT SHUTDOWN within the next 12 hours.

(f) With both channels inoperable,

1. restore the inoperable channel(s) to OPERABLE status within 48 hours, or

2. initiate an alternate means of monitoring the subcooled margin, or

3. be in at least HOT SHUTDOWN within the next 12 hours.

(g) With the number of OPERABLE Core Exit Thermocouples per core quadrant ~~channels~~ one less than the minimum ~~channels~~ operable requirement, either restore the inoperable Core Exit Thermocouple(s) ~~channel~~ to OPERABLE status within 7 days, or be in at least HOT SHUTDOWN within the next 12 hours.

(h) With all Core Exit Thermocouples within a core quadrant ~~both channels~~ inoperable, either restore the inoperable Core Exit Thermocouple(s) ~~channel(s)~~ to OPERABLE status within 48 hours or be in at least HOT SHUTDOWN within the next 12 hours.

(i) With the number of OPERABLE Core Exit Thermocouples less than the four per core quadrant required by NUREG-0737, either restore to at least four OPERABLE ~~channels~~ Core Exit Thermocouples per core quadrant within seven days of discovery of loss of operability, or prepare and submit a special report to the Commission pursuant to Specification 5.9.3 within 30 days, outlining the actions taken, the cause of the inoperability and the plans for restoring the inoperable Core Exit Thermocouple(s) ~~channel~~ to OPERABLE status.

(j) A channel is eight sensors in a probe. A channel is OPERABLE if four or more sensors, two or more in the upper four and two or more in the lower four, are OPERABLE.

ATTACHMENT B

DISCUSSION, JUSTIFICATION, AND NO SIGNIFICANT HAZARDS CONSIDERATION

Omaha Public Power District (OPPD) is proposing to change Specification 2.7, "Electrical Systems," to correct inconsistencies and to provide further guidance on equipment necessary for the 161kV power supply, and to reflect changes in the emergency diesel generator fuel oil calculations as a result of the Design Basis Reconstitution program. Additionally, administrative changes are proposed for Specification 2.7 and Table 2-10. Following is the discussion and justification for the proposed changes.

Specification 2.7
Electrical Systems

Specification 2.7(1)
Minimum Requirements

As currently written this specification applies above 300 degrees F; however, the modification to minimum requirements only applies after the reactor is critical. If the reactor is above 300 degrees but not yet critical, and a listed system is declared inoperable, Specification 2.0.1 is invoked which requires the unit to be placed in hot shutdown within 6 hours. If the same system is declared inoperable at full power the modification to minimum requirements apply which contain an allowed outage time for the specific system and additionally allow 12 hours to place the unit in hot shutdown if the system outage time cannot be met.

The proposed revision to Specification 2.7(2) as it applies to 2.7(1), would allow the same modifications to minimum requirements above 300 degrees F as allowed after criticality. However, it would not allow the reactor to be made critical unless all of the listed systems are operable.

The statement concerning minimum requirements is being revised to add the word "coolant" and delete the word "up" to be more consistant with Specification 2.5.

Administrative Changes

Specifications 2.7(1)a.,2.7(1)b., and 2.7(1)d. contain typographical errors. The equipment designation for transformers is identified as "TI" and is being corrected to read "T1."

Specification 2.7(1)i,j, and k are being revised to include the specific equipment designations.

Specification 2.7(1)h. contains typographical errors. The equipment designation for electrical panels is identified as "A1" and is being corrected to read "A1."

Specification 2.7(1)l. contains a statement concerning the "engine base day tank," which is misleading. The engine mounted "base tank" and the wall mounted "day tank" (auxiliary tank) are two separate tanks. This specification is being revised to more closely reflect the wording of the Standard Technical Specifications and to reflect the actual equipment nomenclature.

Specification 2.7(2)
Modification of Minimum Requirements

The proposed revision would allow the modification of minimum requirements to apply after the reactor is above 300 degrees F or after the reactor has been made critical. This revision will not allow the reactor to be made critical unless all systems listed in 2.7(1) are operable. Additional clarification is also proposed for the time limits contained in the action statement. This proposed change is consistent with the present specification and does not change the allowed outage time. The action statement allows a total of 48 hours to reach the cold shutdown condition. Specification 2.0.1, which would be invoked if systems in excess of the modification to minimum requirements are inoperable, allows a total of 42 hours to reach the cold shutdown condition.

Proposed Specifications Concerning Inoperability of House Service Transformers

OPPD has reviewed Technical Specification 2.7(2)b house service transformers T1A-3 and T1A-4 and 2.7(2)n 161kV off-site power supply Limiting Conditions for Operation for that equipment using the guideline provided by the NRC in a Safety Evaluation Report dated January 30, 1990. (ACN No. 9002070242) The proposed Technical Specification will delete the present specification 2.7(2)n in its entirety and modify 2.7(2)b to provide direction on the 161kV supply. The proposed specification will define time limits and reporting requirements.

Proposed Specification 2.7(2)b.
One House Service Transformer (T1A-3 or T1A-4) Inoperable

This specification would allow operation for seven (7) days with one house service transformer out of service and is consistent with the present specifications. Verbal notification of the transformer inoperability will be made within 4 hours. Added to this portion of the specification is a clause which permits operation beyond the seven days provided OPPD submits a report to the NRC within 48 hours detailing restoration plans and measures taken to prevent a plant trip and diesel generator inoperability while the transformer is out of service. Continued operation beyond 7 days would also require NRC concurrence.

Continued operation is considered desirable in that a unit shutdown would result in the loss of one of the 4.16kV safeguards buses resulting in challenges to the diesel safety system and primary system transients. The proposed specification also directs the operability verification of the diesel generator associated with the inoperable House Service Transformer to be completed. This provides additional assurance that the plant can be safely shutdown, if required. Verification is defined as a reverification of the last monthly surveillance test. Demonstrating operability of the diesel generator by conducting the surveillance test is not desirable. Conducting the surveillance test requires that the diesel be taken out of the automatic mode. This would create a situation whereby one division of safeguards equipment would be without any emergency power for the duration of the test.

Proposed Specification 2.7(2)c.
Both House Service Transformers (T1A-3 and T1A-4) Inoperable

The proposed specification would allow operation for 72 hours with both house service transformers out of service. The specification has been clarified to indicate that the loss of the 161kV off-site power is considered to render both House Service Transformers inoperable. Demonstrating operability of the diesel generators by conducting the surveillance test is not desirable. Consistent with the present specification, the operability of both diesel generators is to be verified, which is defined as a reverification of the last monthly surveillance test. Conducting the surveillance test requires that the diesel be taken out of the automatic mode. This would create a situation whereby one division of safeguards equipment would be without any emergency power for the duration of the test.

The reporting requirement specifies that a 4 hour verbal notification be made to the NRC. If operation is to be continued beyond 72 hours a report must be sent to the NRC within 48 hours detailing restoration plans and additional measures to be taken while the transformers are out of service. Continued operation beyond 72 hours would also require NRC concurrence.

Continued operation is a preferred course of action rather than shutdown because a turbine generator trip would result in a loss of off-site power. This loss of off-site power would cause the following:

1. Diesel generator start and energizing of the safety busses.

2. Natural circulation cooling of fuel to remove decay heat.

3. Decay heat removal from the steam generators via the main steam safety valves due to loss of the condenser.

4. A challenge to the automatic auxiliary feedwater system.

The plant cannot establish the normal hot shutdown configuration until 345kV backfeed has been established after the turbine generator trip. Condenser operations can then be reestablished and the reactor coolant pumps restarted.

Specification 2.7(2)n

This specification is to be deleted. The loss of the 161kV off-site supply will be specified in Technical Specification 2.7(2)c. The specification which permits reactor startup with the 161kV out of service will be deleted. The present Technical Specification is incorrect in that although the reactor could be taken to hot standby (critical), the generator could not be synchronized to the power grid or even supply house loads. This is because the disconnect switch DS-T1, is a manual/motor switch with no synchronization capability. The 345kV bus must be de-energized before closing DS-T1. Removal of the 345kV bus would de-energize all four Reactor Coolant Pumps and this would scram the reactor.

Administrative Changes

Specification 2.7(2)d. is being revised to provide consistent wording and to clarify that either bus 1A3 or 1A4 may be inoperable.

Specification 2.7(2)e. contains a typographical error. The equipment designation for transformers is identified as "TI" and is being corrected to read "T1." This specification is also being clarified to indicate what components may be inoperable. Redundant components are not necessarily powered by the corresponding "redundant" transformer in the other electrical division. For example, if transformer T1B-3A is inoperable charging pump CH-1A is inoperable. The corresponding transformer on the other electrical division T1B-4A does not supply power to any charging pumps. This revision clarifies that there cannot be inoperable components redundant to those components powered by the inoperable transformer.

Specification 2.7(2)f. is being revised to clarify that only one of the 480 V buses may be inoperable at any given time and to clarify that there cannot be inoperable components redundant to those components powered by the inoperable bus.

Specification 2.7(2)g. is being revised to clarify that either group of Motor Control Centers (MCC) may be inoperable at the same time. This is consistent with the wording of the present specification. The specification maintains the additional requirement that redundant components be operable.

Specification 2.7(2)h, i, and j are being revised to add equipment designations.

Specification 2.7(2)k. is being revised to add equipment designations and clarify that there cannot be inoperable components redundant to those components powered by the inoperable buses.

Specification 2.7(2)l. and 2.7(2)m are being revised to add equipment designations and to indicate that either one or its redundant system may be inoperable. The inclusion of the word "and" in this specification is incorrect and is being deleted.

Specification 2.7(2)m. is being revised to indicate that either one system or its redundant system may be inoperable. The inclusion of the word "and" in this specification is incorrect and is being deleted.

Specification 2.7(2)n. is being revised to provide consistent wording and to clarify that either AC instrument panel AI-42A or AI-42B may be inoperable.

Basis of Specification 2.7

Changes to Emergency Diesel Generator Fuel Oil Storage Requirements Contained in the Basis

OPPD is proposing to change the diesel generator fuel oil storage requirements as discussed in the basis for Technical Specification 2.7. Specifically these changes are: (1) changing the operating time of the Emergency Diesel Generators (EDG's) utilizing the engine mounted base tanks from five (5) to two and one half (2.5) hours; and (2) changing the minimum EDG operating time utilizing the engine mounted base tanks and the underground storage tank from seven (7) days to three and one half (3.5) days.

Discussion

In 1988 a concern was raised by an inspector regarding the lack of a diesel generator fuel oil consumption calculation. The Design Basis Reconstitution Project located the original Gibbs and Hill (G&H) load model but not the calculation. This model was used with the engine fuel consumption rates to determine the amount of fuel oil required to operate either diesel for 7 days. Rerunning the original model indicated that more than 19,000 gallons (versus the 16,000 gallon Technical Specification requirement) would be necessary. This resulted in Fort Calhoun being unable to meet the requirement contained in the Updated Safety Analysis Report (USAR) and the Technical Specification basis to maintain sufficient on-site fuel oil to operate a diesel for 7 days. This discrepancy was reported to the NRC in Licensee Event Report 50-285/88-020, dated October 3, 1988. (LIC-88-870)

The model used to derive the present fuel oil requirements bounds several changes to the original G&H model:

(1) current strategy on long term core cooling and containment heat removal using expected loads as opposed to nameplate loads;

(2) the addition of the auxiliary feedwater pump (FW-6) to the model along with the dead load on DG-1 and DG-2 to accommodate FW-6, and

(3) a decrease in the amount of fuel available in the underground storage tank to account for an inaccessible 240 gallons due to the location of the fuel oil transfer pumps' foot valves.

Based on the revised EDG bounding loading model, the diesel generator's operating time was calculated for two situations, the operating time available prior to transferring fuel from the underground storage tank, and total operating time. The calculation assumes only 15,760 gallons of fuel is accessible from the underground storage tank when the 16,000 gallons required by Technical Specification 2.7(1)1. is maintained. In addition, the calculation assumes that one diesel generator is secured within thirty (30) minutes of accident initiation.

The results indicate that, with a 550 gallon base tank and 16,000 gallon minimum in the underground storage tank, the diesel generators are capable of operating for the following amount of time:

	Base Tank Alone	Base Tank Plus Underground Storage Tank		
		Min. Req'd (3.5 days)	Calculated Operating	Design * Margin
DG-1	2.8 hrs	84 hrs	85.8 hrs	1.8 hrs
DG-2	2.8 hrs	84 hrs	85.8 hrs	1.8 hrs

* Additional design margin exists beyond the 1.8 hours shown. Fuel consumption is based on USAR Table 8.4-1 maximum loads at 90 degrees F. This conservatively maximizes fuel consumption. These values are above the expected load profile and above the allowable loads for diesel operability at temperatures higher than 90 degrees F.

In addition to the 550 gallons available in the engine mounted base tanks, each DG has an additional 300 gallon wall-mounted auxiliary tank which gravity feeds the base tank. The level in this auxiliary tank is maintained by automatic operation of fuel oil transfer pumps in response to low and high level signals which are also alarmed in the control room. This additional volume of fuel oil extends the available time before the fuel oil transfer pumps would be required to transfer fuel from the underground storage tank to the engine mounted tank(s). No credit is taken for this additional fuel oil in the calculation. As shown above, adequate margin exists to assure that one of the diesel generators can be secured prior to the necessity to transfer any fuel from the underground storage tank. Therefore, the change in operating time from 5 hours to 2.5 hours is considered to be of negligible consequence.

Fort Calhoun Station currently obtains its diesel generator fuel oil from a supplier in Omaha, Nebraska, approximately 26 miles from the Fort Calhoun Station. In addition, OPPD has received written confirmation from a second supplier of fuel oil, located in Fort Calhoun, Nebraska (approximately 5 miles from the station), that barring severe weather, fuel can be delivered to the station within one hour of request. The change from a seven (7) day to a three and on half (3.5) day operating time stated above is within the Technical Specification basis of being able to secure fuel oil within three (3) days. Therefore, this change in operating time is considered to have negligible consequences.

Changes to Discussions Concerning the 161kV Power Supply Contained in the Basis

Clarification concerning the loss of the 161kV line has been added to the basis of Specification 2.7. This clarification indicates that the loss of the incoming 161kV line renders the house transformers inoperable due to their inability to supply the 4.16kV safeguards buses 1A3 and 1A4. In order to restore off-site power to the safeguards buses upon loss of the 161kV line, 345kV backfeed must be manually established. Therefore, upon the loss of the 161kV line, the house service transformers are considered inoperable.

Additional clarification has also been added concerning the operability of the auxiliary transformers. Normal plant startup and shutdown requires manually transferring the 4.16kV buses 1A1, 1A2, 1A3, and 1A4 between the 345/22kV and the 161kV power supply. During the actual realignment manipulations, off-site power, although available, cannot power the transformers until completion of the manipulations. This clarification states that the transformers are not considered inoperable during these startup and shutdown realignments. During normal power operations should the 161kV incoming line be lost, the auxiliary power transformers supply the 4.16kV buses 1A1, 1A2, 1A3, and 1A4 from the 345/22kV system after automatic fast transfer occurs.

Administrative Changes to the Basis

A correction has been made to the example contained in the basis which discusses the results of losing bus 1A3. In the normal electrical lineup bus 1A3 (4.16kV) powers bus 1B3A (480 V) and island bus 1B3A-4A (480 V). This lineup would cause the loss of two high pressure safety injection (HPSI) pumps and one containment spray (CS) pump and leave one HPSI and two CS pumps available upon loss of bus 1A3. This correction does not affect the number of pumps assumed to be available in a Design Basis Accident.

The rating of the battery chargers is being revised from "200" to "400" amperes to reflect an increase in rating as a result of modification MR-FC-84-119.

The word "avilible" is misspelled and is being corrected to read "available."

The discussion of obtaining fuel oil in the vicinity of Omaha is being revised to correctly state in the vicinity of the Fort Calhoun Station.

The discussion concerning the ability of the batterys to handle all loads following a DBA is being generalized to reflect the requirements of the batterys and chargers as discussed in USAR Section 8.4.2. The batterys are rated for 8 hours and cannot handle all loads indefinitely as might be implied by this statement.

The word "channel" is being deleted as it is unnecessarily stated twice.

References 1, 2, and 3 are being revised from FSAR (Final Safety Analysis Report) to reflect the updated version of this document which is designated the USAR. (Updated Safety Analysis Report)

Specification 2.21, Table 2-10
Post-Accident Monitoring Instrumentation Operating Limits

Administrative Changes

Page 2-98

Table 2-10 Item 5, Containment Water Level Narrow Range (LT-559 & LT-600), contains a typographical error. The equipment identification for level transmitter "LT-559" is incorrect and is being corrected to read "LT-599."

Page 2-98a

Table 2-10 Note (c) contains a typographical error. Note (c) incorrectly states, "With hot channels inoperable,.." and is being corrected to read "With both channels inoperable,.."

Table 2-10 Note (i) is being revised to add the words "per core quadrant" to clarify that the number of Core Exit Thermocouples required by NUREG-0737 are four per core quadrant and not a total of four in the entire core. In addition, the word "channels" is revised to read "Core Exit Thermocouples." These proposed changes are consistent with an interpretation of this specification from the Office of Nuclear Reactor Regulation in a memorandum to NRC Region IV dated December 11, 1990. (TAC No. 75596)

Table 2-10 Notes (g) and (h) are being revised to reflect the guidance discussed on Note (i) for consistent wording.

Basis for No Significant Hazards Consideration

The proposed changes do not involve significant hazards consideration because operation of Fort Calhoun Station in accordance with this change would not:

1. **Involve a significant increase in the probability or consequence of an accident previously evaluated.**

Changes to the Minimum Requirements and Modification to the Minimum Requirements

The proposed changes to the minimum requirements and modification to minimum requirements do not increase the probability or consequences of an accident previously evaluated. This proposed change would allow the modification to minimum requirements that apply when the reactor is at full power to also apply when the reactor is above 300 degrees F but not critical. The consequences of an accident at full power are significantly greater than when the reactor is not critical. By not allowing the unit to be made critical unless all of the systems listed in the minimum requirements are operable ensures that the consequences would not be increased.

Changes Concerning the Operation of the 161kV Line and Associated Equipment

The proposed changes concerning the operation of the 161kV off-site power line and associated equipment does not adversely affect the consequences or probability of an accident or event previously evaluated. This change clarifies the operability requirements of the remaining power sources during times when the House Service Transformers are out-of-service, requires reporting of actions to restore the transformer(s) and other precautions to be taken while the transformer is out-of-service, and removes the permissive to restart with the 161kV line out-of-service. The present Specifications allow the 161kV line, and therefore the transformers, to be out-of-service for an indefinite time period. This change defines a consistent allowed outage time for both the 161kV line and the associated transformers, and requires NRC concurrence to continue to operate beyond the specified time.

Changes Concerning the Diesel Generator Fuel Oil Storage Requirements

The changes to the basis of Specification 2.7 do not adversely affect the consequences or probability of an accident or event previously evaluated. The proposed changes correct errors in calculations and take into account additional electrical loadings, which affect the amount of time the emergency diesel generator can operate on its full engine mounted tank fuel oil supply and the amount of time one emergency diesel can run on its full engine mounted tank and the fuel available from the underground storage tank.

The proposed change in operating time from 5 hours to 2.5 hours, utilizing only the engine mounted tank, does not involve a significant increase in the probability or consequences of an accident previously evaluated. An additional 300 gallon auxiliary tank gravity feeds the 550 gallon engine mounted tank. The level in the auxiliary tank is maintained by automatic operation of the fuel oil transfer pumps in response to low and high level signals which are alarmed in the Control Room. This additional tank extends the available time before fuel oil transfer pumps would be required to operate in order to fill the engine mounted tank.

The proposed change from 7 days to 3.5 days of underground storage tank fuel oil capacity for one emergency diesel operating does not involve a significant increase in the probability or consequence of an accident previously evaluated. Additional fuel is available from several sources and can be delivered within the required 3 days as stated in the basis to Technical Specification 2.7. Therefore, this proposed change is within the present acceptance criterion for obtaining fuel.

Changes to Table 2-10

The proposed changes to Table 2-10 are administrative only. These changes consist of correcting typographical errors and providing clarification which is consistent with an interpretation from the Office of Nuclear Reactor Regulation. Therefore, the changes to Table 2-10 does not involve a significant increase in the probability or consequences of an accident previously evaluated.

2. **Create the possibility of a new or different kind of accident from any accident previously evaluated.**

Changes to the Minimum Requirements and Modification to the Minimum Requirements

The proposed changes to the minimum requirements and modification to minimum requirements do not create the possibility of a new of different kind of accident from any accident previously evaluated. This proposed change would allow the modification to minimum requirements that apply when the reactor is at full power to also apply when the reactor is above 300 degrees F, but not critical.

Changes Concerning the Operation of the 161kV Line and Associated Equipment

It has been determined that no new or different type of accident is created because no new or different modes of operation are proposed for the plant. The proposed requirements to verify the operability of the remaining emergency power supply provides a higher level of assurance that alternative power sources are operable. Removal of the permissive to restart the plant when the 161kV line is out-of-service eliminates the possibility of an accident in a higher mode than that existing at the time the 161kV service was lost. There will be no electrical system configuration changes as a result of this change. Plant response to transients will be the same as currently analyzed in the Updated Safety Analysis Report.

Changes Concerning the Diesel Generator Fuel Oil Storage Requirements

It has been determined that no new or different type of accident is created because no new or different modes of operation are proposed for the plant. The proposed change in operating time due to the available on-site fuel oil storage capacity is within the present acceptance criterion for obtaining fuel.

Changes to Table 2-10

The proposed changes to Table 2-10 are administrative only. These changes consist of correcting typographical errors and providing clarification which is consistent with an interpretation from the Office of Nuclear Reactor Regulation. Therefore, the changes to Table 2-10 cannot create the possibility of a new or different kind of accident from any accident previously evaluated.

3. **Involve a significant reduction in the margin of safety.**

Changes to the Minimum Requirements and Modification to the Minimum Requirements

The proposed changes to the minimum requirements and modification to minimum requirements does not reduce the margin of safety. This proposed change would allow the modification to minimum requirements that apply when the reactor is at full power to also apply when the reactor is above 300 degrees F, but not critical. Equipment necessary to be operable above 300 degrees F is specified in additional Specifications. This proposed change would not alter the number of pumps or valves which are required to be operable.

Changes Concerning the Operation of the 161kV Line and Associated Equipment

This change results in an increase in the margin of safety associated with the normal source of auxiliary power by eliminating the permissive to restart with the 161kV line out-of-service.

Changes Concerning the Diesel Generator Fuel Oil Storage Requirements

The proposed change in operating time due to the available on-site fuel oil storage capacity is within the present acceptance criterion for obtaining fuel as discussed in the basis to Technical Specification 2.7. Therefore, this channge does not involve a significant reduction in a margin of safety.

Changes to Table 2-10

The proposed changes to Table 2-10 are administrative only. These changes consist of correcting typographical errors and providing clarification which is consistent with an interpretation from the Office of Nuclear Reactor Regulation. Therefore, the changes to Table 2-10 do not reduce any margin of safety.

The Commission has provided guidance concerning the application of the standards for determining whether a significant hazards consideration exists by providing certain examples (48 FR 14870) of amendments that are considered not likely to involve significant hazards consideration. Example (i) concerns a purely administrative change; for example, a change to achieve consistency throughout the technical specifications, correction of an error, or a change in nomenclature. Example (ii) concerns a change that constitutes an additional limitation, restriction, or control not presently included in the technical specifications; for example, a more restrictive surveillance requirement. Example (vi) concerns a change which either may result in some increase to the probability or consequences of a previously analyzed accident or may reduce in some way a safety margin, but where the results of the change are clearly within acceptable criteria with respect to the system.

The proposed changes to Specification 2.7(1) and Table 2-10 are similar to example (i) in that the changes correct typographical errors and provide clarification only. The proposed changes concerning the availability of the 161kV power supply are similar to examples (i) and (ii) in that the change deletes inconsistencies between Specification 2.7(2)b. and 2.7(2)n., and that additional restrictions are being proposed upon a loss of the 161kV off-site power supply. The proposed changes to the on-site fuel oil storage requirements are similar to examples (i) and (vi) in that the changes correct an error discovered in the fuel consumption calculation and that the change is clearly within the acceptance criterion of being able to procure off-site fuel within three days.

Therefore, based on the above considerations, OPPD does not believe that this proposed amendment involves a significant hazards consideration as defined by 10 CFR 50.92 and the proposed changes will not result in a condition which significantly alters the impact of the Station on the environment. Thus, the proposed change meets the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9) and pursuant to 10 CFR 51.22(b) no environmental assessment need be prepared.