

ATTACHMENT C

REVISED TECHNICAL SPECIFICATION PAGES

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LIMITING CONDITIONS FOR OPERATION

3.7.B Standby Gas Treatment System and Control Room with Efficiency Air Filtration System

1. Standby Gas Treatment System
 - a. Except as specified in 3.7.B.1.c below, both trains of the standby gas treatment system and the diesel generators required for operation of such trains shall be operable at all times when secondary containment integrity is required or the reactor shall be shutdown in 36 hours.
 - b. (1.) The results of the in-place cold DOP tests on HEPA filters shall show $\geq 99\%$ DOP removal. The results of halogenated hydrocarbon tests on charcoal adsorber banks shall show $\geq 99\%$ halogenated hydrocarbon removal.

(2.) The results of the laboratory carbon sample analysis shall show $\geq 95\%$ methyl iodide removal at a velocity within 10% of system design, 0.5 to 1.5 mg/m³ inlet methyl iodide concentration, $\geq 70\%$ R.H. and $\geq 190^\circ$ F. The analysis results are to be verified as acceptable within 31 days after sample removal, or declare that train inoperable and take the actions specified 3.7.B.1.c.

SURVEILLANCE REQUIREMENTS

4.7.B Standby Gas Treatment System and Control Room High Efficiency Air Filtration System

1. Standby Gas Treatment System
 - a. (1.) At least once every 18 months, it shall be demonstrated that pressure drop across the combined high efficiency filters and charcoal adsorber banks is less than 8 inches of water at 4000 cfm.

(2.) At least once every 18 months, demonstrate that the inlet heaters on each train are operable and are capable of an output of at least 14 kW.

(3.) The tests and analysis of Specification 3.7.B.1.b. shall be performed at least once every 18 months or following painting, fire or chemical release in any ventilation zone communicating with the system while the system is operating that could contaminate the HEPA filters or charcoal adsorbers.

(4.) At least once every 18 months, automatic initiation of each branch of the standby gas treatment system shall be demonstrated, with Specification 3.7.B.1.d satisfied.

LIMITING CONDITIONS FOR OPERATIONSURVEILLANCE REQUIREMENTS

3.7.B (Continued)

4.7.P (Continued)

* c. From and after the date that one train of the Standby Gas Treatment System is made or found to be inoperable for any reason, continued reactor operation, irradiated fuel handling, or new fuel handling over spent fuel pool or core is permissible only during the succeeding seven days providing that within 2 hours all active components of the other standby gas treatment train shall be demonstrated to be operable.

d. Fans shall operate within $\pm 10\%$ of 4000 cfm.

* e. Except as specified in 3.7.B.1.c, both trains of the Standby Gas Treatment System shall be operable during irradiated fuel handling, or new fuel handling over the spent fuel pool or core. If the system is not operable, fuel movement shall not be started. Any fuel assembly movement in progress may be completed.

(5.) Each train of the standby gas treatment system shall be operated for at least 15 minutes per month.

(6.) The tests and analysis of Specification 3.7.B.1.b.(2) shall be performed after every 720 hours of system operation.

1. (1.) In-place cold DOP testing shall be performed on the HEPA filters after each completed or partial replacement of the HEPA filter bank and after any structural maintenance on the HEPA filter system housing which could affect the HEPA filter bank bypass leakage.

(2.) Halogenated hydrocarbon testing shall be performed on the charcoal adsorber bank after each partial or complete replacement of the charcoal adsorber bank or after any structural maintenance on the charcoal adsorber housing which could affect the charcoal adsorber bank bypass leakage.

* During RFO #9, one train can be without its safety-related bus and/or emergency diesel generator without entering the LCO action statement provided the following conditions are met:

- Fuel movement will not occur until five days following reactor shutdown.
- Prior to and during fuel movement, the SBO D/G or the Shutdown Transformer is required to be operable and capable of supplying power to the emergency bus.
- Fuel movement will not occur until the reactor vessel is flooded up to elevation 114'.
- The train of SGTS and CRHEAF without its safety related bus or without its emergency diesel generator will have power supplied from a normal offsite source via a non safety-related bus. The normal offsite sources consist of either the Startup Transformer on Unit Auxiliary Transformer (Backscuttle Mode).

LIMITING CONDITIONS FOR OPERATION

3.7.B (Continued)

2. Control Room High Efficiency Air Filtration System

- * a. Except as specified in Specification 3.7.B.2.c below, both trains of the Control Room High Efficiency Air Filtration System used for the processing of inlet air to the control room under accident conditions and the diesel generator(s) required for operation of each train of the system shall be operable whenever secondary containment integrity is required and during fuel handling operations.
- b. (1.) The results of the in-place cold DOP tests on HEPA filters shall show $\geq 99\%$ DOP removal. The results of the halogenated hydrocarbon tests on charcoal adsorber banks shall show $\geq 99\%$ halogenated hydrocarbon removal when test results are extrapolated to the initiation of the test.
- (2.) The results of the laboratory carbon sample analysis shall show $\geq 95\%$ methyl iodide removal at a velocity within 10% of system design, 0.05 to 0.15 mg/m³ inlet methyl iodide concentration, $\geq 70\%$ R.H., and $\geq 125^\circ$ F. The analysis results are to be verified as acceptable within 31 days after sample removal, or declare that train inoperable and take the actions specified in 3.7.B.2.c.

* During RFO #9, one train can be without its safety-related bus and/or its emergency diesel generator without entering the LCO action statement provided the conditions listed on page 158A are met.

SURVEILLANCE REQUIREMENTS

4.7.b (Continued)

2. Control Room High Efficiency Air Filtration System

- a. At least once every 18 months the pressure drop across each combined filter train shall be demonstrated to be less than 6 inches of water at 1000 cfm or the calculated equivalent.
- b. (1.) The tests and analysis of Specification 3.7.B.2.b shall be performed once every 18 months or following painting, fire or chemical release in any ventilation zone communicating with the system while the system is operating.
- (2.) In-place cold DOP testing shall be performed after each complete or partial replacement of the HEPA filter bank or after any structural maintenance on the system housing which could affect the HEPA filter bank bypass leakage.
- (3.) Halogenated hydrocarbon testing shall be performed after each complete or partial replacement of the charcoal adsorber bank or after any structural maintenance on the system housing which could affect the charcoal adsorber bank bypass leakage.
- (4.) Each train shall be operated with the heaters in automatic for at least 15 minutes every month.
- (5.) The test and analysis of Specification 3.7.B.2.b.(2) shall be performed after every 720 hours of system operation.

LIMITING CONDITIONS FOR OPERATIONSURVEILLANCE REQUIREMENTS

3.7.B (Continued)

4.7.B (Continued)

- * c. From and after the date that one train of the Control Room High Efficiency Air Filtration System is made or found to be incapable of supplying filtered air to the control room for any reason, reactor operation or refueling operations are permissible only during the succeeding 7 days providing that within 2 hours all active components of the other CRHEAF train shall be demonstrated operable. If the system is not made fully operable within 7 days, reactor shutdown shall be initiated and the reactor shall be in cold shutdown within the next 36 hours and irradiated fuel handling operations shall be terminated within 2 hours. Fuel handling operations in progress may be completed.
- d. Fans shall operate within $\pm 10\%$ of 1000 cfm.

- c. At least once every 18 months demonstrate that the inlet heaters on each train are operable and capable of an output of at least 14 kw.
- d. Perform an instrument functional test on the humidistats controlling the heaters once per 18 months.

- * During RFO #9, one train can be without its safety-related bus and/or its emergency diesel generator without entering the LCO action statement provided the conditions listed on page 158A are met.

ATTACHMENT D

EXISTING TECHNICAL SPECIFICATION PAGES
MARKED UP TO SHOW THE PROPOSED CHANGES

3.7.B Standby Gas Treatment System and Control Room With Efficiency Air Filtration System

4.7.B Standby Gas Treatment System and Control Room High Efficiency Air Filtration System

1. Standby Gas Treatment System

1. Standby Gas Treatment System

a. Except as specified in 3.7.B.1.c below, both trains of the standby gas treatment system and the diesel generators required for operation of such trains shall be operable at all times when secondary containment integrity is required or the reactor shall be shutdown in 36 hours.

a. (1.) At least once every 18 months, it shall be demonstrated that pressure drop across the combined high efficiency filters and charcoal adsorber banks is less than 8 inches of water at 4000 cfm.

b. (1.) The results of the in-place cold DOP tests on HEPA filters shall show $\geq 99\%$ DOP removal. The results of halogenated hydrocarbon tests on charcoal adsorber banks shall show $\geq 99\%$ halogenated hydrocarbon removal.

(2.) At least once every 18 months, demonstrate that the inlet heaters on each train are operable and are capable of an output of at least 14 kW.

(2.) The results of the laboratory carbon sample analysis shall show $\geq 95\%$ methyl iodide removal at a velocity within 10% of system design, 0.5 to 1.5 mg/m³ inlet methyl iodide concentration, $\geq 70\%$ R.H. and $\geq 190^\circ\text{F}$. The analysis results are to be verified as acceptable within 31 days after sample removal, or declare that train inoperable and take the actions specified 3.7.B.1.c.

(3.) The tests and analysis of Specification 3.7.B.1.b. shall be performed at least once every 18 months or following painting, fire or chemical release in any ventilation zone communicating with the system while the system is operating that could contaminate the HEPA filters or charcoal adsorbers.

(4.) At least once every 18 months, automatic initiation of each branch of the standby gas treatment system shall be demonstrated, with Specification 3.7.B.1.d satisfied.

c. From and after the date that one train of the Standby Gas Treatment System is made or found to be inoperable for any reason, continued reactor operation, irradiated fuel handling, or new fuel

(5.) Each train of the standby gas treatment system shall be operated for at least 15 minutes per month.

(6.) The tests and analysis of Specification 3.7.B.1.b.(2) shall be performed after every 720 hours of system operation.

MOVED TO PAGE 158A

ADDED

Revision 115e

Amendment No. 50, 51, 52, MZ

3.7.B (Continued)

4.7.B (Continued)

handling over spent fuel pool or core is permissible only during the succeeding seven days providing that within 2 hours all active components of the other standby gas treatment train shall be demonstrated to be operable.

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PAGE 158

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PAGE 158

b. (1.) In-place cold DOP testing shall be performed on the HEPA filters after each completed or partial replacement of the HEPA filter bank and after any structural maintenance on the HEPA filter system housing which could affect the HEPA filter bank bypass leakage.

(2.) Halogenated hydrocarbon testing shall be performed on the charcoal adsorber bank after each partial or complete replacement of the charcoal adsorber bank or after any structural maintenance on the charcoal adsorber housing which could affect the charcoal adsorber bank bypass leakage.

d. Fans shall operate within $\pm 10\%$ of 4000 cfm.

Except as specified in 3.7.B.1.c, both trains of the Standby Gas Treatment System shall be operable during irradiated fuel handling, or new fuel handling over the spent fuel pool or core. If the system is not operable, fuel movement shall not be started. Any fuel assembly movement in progress may be completed.

ADDED

ADDED

* During RFO #9, one train can be without its safety-related bus and/or emergency diesel generator without entering the LCO action statement provided the following conditions are met:

- Fuel movement will not occur until five days following reactor shutdown.
- Prior to and during fuel movement, the SBO D/G or the Shutdown Transformer is required to be operable and capable of supplying power to the emergency bus.
- Fuel movement will not occur until the reactor vessel is flooded up to elevation 114'.
- The train of SGTS and CRHEAF without its safety related bus or without its emergency diesel generator will have power supplied from a normal offsite source via a non safety-related bus. The normal offsite sources consist of either the Startup Transformer on Unit Auxiliary Transformer (Backscuttle Mode).

3.7.8 (Continued)

2. Control Room High Efficiency Air Filtration System

a. Except as specified in Specification 3.7.8.2.c below, both trains of the Control Room High Efficiency Air Filtration System used for the processing of inlet air to the control room under accident conditions and the diesel generator(s) required for operation of each train of the system shall be operable whenever secondary containment integrity is required and during fuel handling operations.

b. (1.) The results of the in-place cold DOP tests on HEPA filters shall show $\geq 99\%$ DOP removal. The results of the halogenated hydrocarbon tests on charcoal adsorber banks shall show $\geq 99\%$ halogenated hydrocarbon removal when test results are extrapolated to the initiation of the test.

(2.) The results of the laboratory carbon sample analysis shall show $\geq 95\%$ methyl iodide removal at a velocity within 10% of system design, 0.05 to 0.15 mg/m³ inlet methyl iodide concentration, $\geq 70\%$ R.H., and $\geq 125^\circ\text{F}$. The analysis results are to be verified as acceptable within 31 days after sample removal, or declare that train inoperable and take the actions specified in 3.7.8.2.c.



4.7.8 (Continued)

2. Control Room High Efficiency Air Filtration System

a. At least once every 18 months the pressure drop across each combined filter train shall be demonstrated to be less than 6 inches of water at 1000 cfm or the calculated equivalent.

b. (1.) The tests and analysis of Specification 3.7.8.2.b shall be performed once every 18 months or following painting, fire or chemical release in any ventilation zone communicating with the system while the system is operating.

(2.) In-place cold DOP testing shall be performed after each complete or partial replacement of the HEPA filter bank or after any structural maintenance on the system housing which could affect the HEPA filter bank bypass leakage.

(3.) Halogenated hydrocarbon testing shall be performed after each complete or partial replacement of the charcoal adsorber bank or after any structural maintenance on the system housing which could affect the charcoal adsorber bank bypass leakage.

(4.) Each train shall be operated with the heaters in automatic for at least 15 minutes every month.

(5.) The test and analysis of Specification 3.7.8.2.b.(2) shall be performed after every 720 hours of system operation.

* During RFO #9, one train can be without its safety-related bus and/or its emergency diesel generator without entering the LCO action statement provided the conditions listed on page 158A are met.

Revision 115

Amendment No. 50, 51, 52, 101, 112

158B

NEW

3.7.B (Continued)

4.7.B (Continued)

c. From and after the date that one train of the Control Room High Efficiency Air Filtration System is made or found to be incapable of supplying filtered air to the control room for any reason, reactor operation or refueling operations are permissible only during the succeeding 7 days providing that within 2 hours all active components of the other CRHEAF train shall be demonstrated operable. If the system is not made fully operable within 7 days, reactor shutdown shall be initiated and the reactor shall be in cold shutdown within the next 36 hours and irradiated fuel handling operations shall be terminated within 2 hours. Fuel handling operations in progress may be completed.

d. Fans shall operate within $\pm 10\%$ of 1000 cfm.

c. At least once every 18 months demonstrate that the inlet heaters on each train are operable and capable of an output of at least 14 kw.

d. Perform an instrument functional test on the humidistats controlling the heaters once per 18 months.

NEW

* During RFO #9, one train can be without its safety-related bus and/or its emergency diesel generator without entering the LCO action statement provided the conditions listed on page 158A are met.

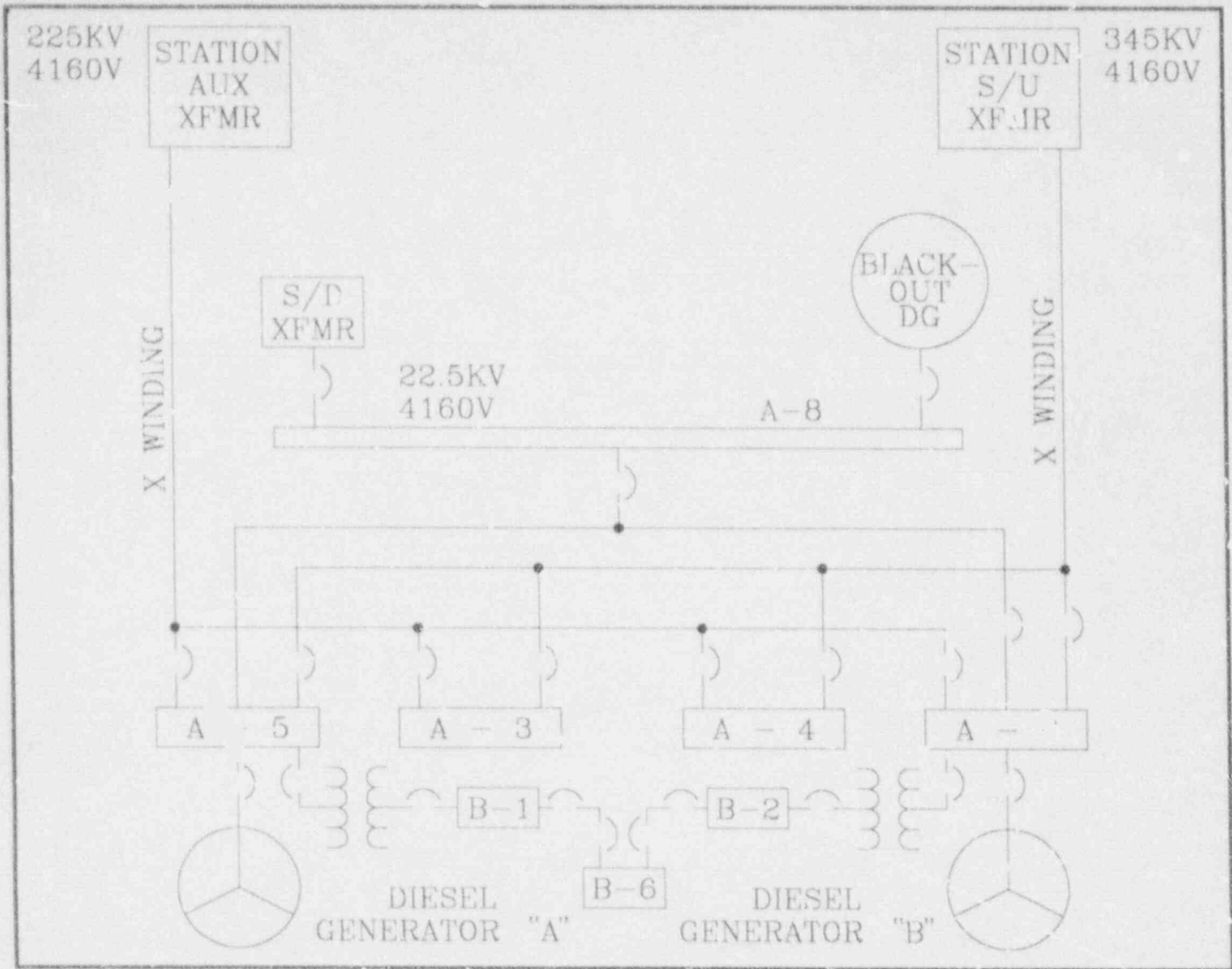
Revision 115

Amendment No. 50, 51, 57, 112

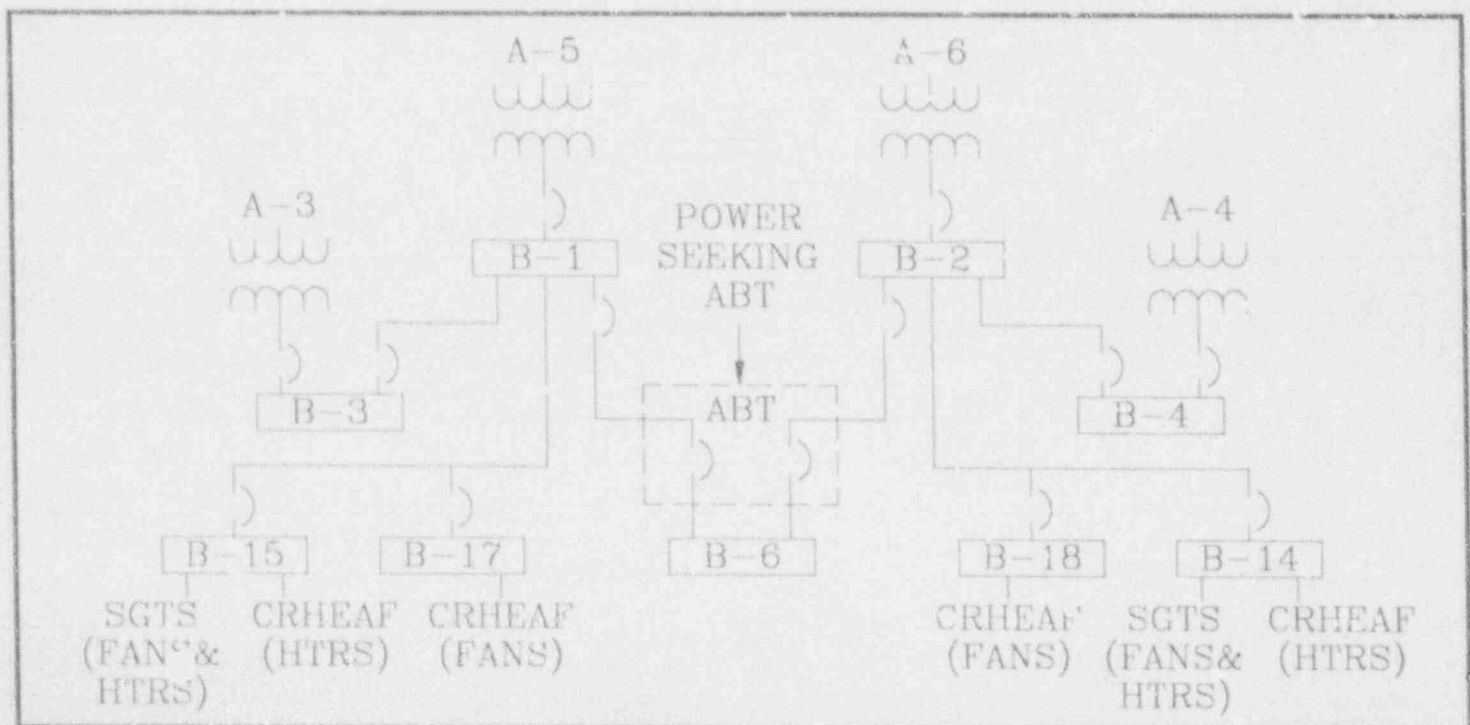
158C

ATTACHMENT E

4160V AND EMERGENCY AC DISTRIBUTION



480VAC DISTRIBUTION

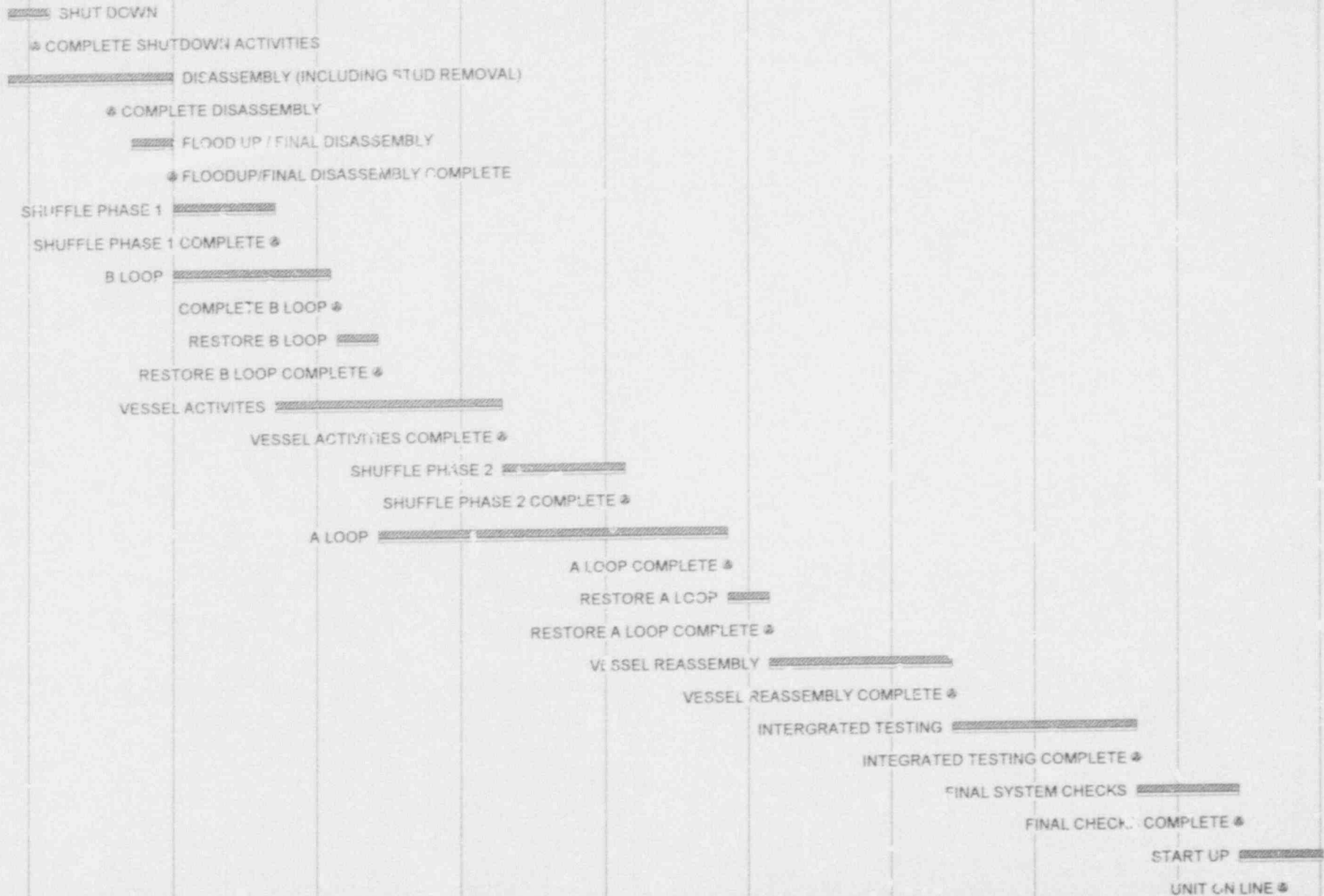


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APRIL

MAY

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ATTACHMENT F

RFO 9 SUMMARY

Pilgrim Nuclear Power Station (DRAFT)