ATTACHMENT B

DECAY TIME

LIMITING CONDITION FOR OPERATION

3.9.3 The reactor shall be subcritical for at least ~~100~~ 168 hours.

APPLICABILITY: During movement of irradiated fuel in the reactor pressure vessel.

ACTION:

With the reactor subscritical for less than ~~100~~ 168 hours, suspend all operations involving movement of irradiated fuel in the reactor pressure vessel. The provisions of Specification 3.0.3 are not applicable.

SURVEILLANCE REQUIREMENTS

4.9.3 The reactor shall be determined to have been subcritical for at least ~~100~~ hours by verification of the date and time of subcriticality prior to movement of irradiated fuel in the reactor pressure vessel.

168

a. In accordance with the code requirements specified in Section 4.1 of the FSAR, with allowance for normal degradation pursuant to the applicable Surveillance Requirements,

b. For a pressure of 2485 psig, and

c. For a temperature of 650°F, except for the pressurizer which is 680°F.

VOLUME

5.4.2 The total water and steam volume of the reactor coolant system is 12,811 ± 100 cubic feet at a nominal Tavg of 576.7°F.

5.5 METEOROLOGICAL TOWER LOCATION

5.5.1 The meteorological tower shall be located as shown on Figure 5.1-1.

5.6 FUEL STORAGE

CRITICALITY

~~5.6.1 The new and spent fuel storage racks are designed and shall be maintained with:~~

~~a. A Keff equivalent to less than or equal to 0.95 with the storage rack filled with unborated water. This value of Keff includes a conservative allowance of:~~

~~1. 2.2% delta k/k uncertainty for all standard and V5H fuel assemblies, and~~

~~2. An additional 0.7% delta k/k uncertainty for standard and V5H fuel assemblies containing Integral Fuel Burnable Absorber (IFBA) pins.~~

~~b. A nominal 10.5 inch center-to-center distance between fuel assemblies placed in the spent fuel storage racks.~~

~~c. A nominal 21.0 inch center-to-center distance between fuel assemblies placed in the new fuel storage racks.~~

~~d. Standard or Vantage 5H fuel assemblies with maximum enrichment of 4.55 w/o U235 and a Kinf less than or equal to 1.453 in the core geometry at 68°F with no soluble boron.~~

REPLACE WITH INSERT 1

DRAINAGE

5.6.2 The spent fuel storage pool is designed and shall be maintained to prevent inadvertent draining of the pool below elevation 124'8".

CAPACITY

5.6.3 The spent fuel storage pool is designed and shall be maintained with a storage capacity limited to no more than ~~1170~~ 1632 fuel assemblies.

5.7 COMPONENT CYCLIC OR TRANSIENT LIMIT

5.7.1 The components identified in Table 5.7-1 are designed and shall be maintained within the cyclic or transient limits of Table 5.7-1.

INSERT 1

5.6.1.1 The new fuel storage racks are designed and shall be maintained with:

a. A maximum Keff equivalent of 0.95 with the storage racks flooded with unborated water.

b. A nominal 21.0 inch center-to-center distance between fuel assemblies.

c. A maximum unirradiated fuel assembly enrichment of 4.5 w/o U-235.

5.6.1.2 The spent fuel storage racks are designed and shall be maintained with:

a. A maximum Keff equivalent of 0.95 with the storage racks filled with unborated water.

b. A nominal 10.5 inch center-to-center distance between fuel assemblies stored in Region 1 (flux trap type) racks.

c. A nominal 9.05 inch center-to-center distance between fuel assemblies stored in Region 2 (non-flux trap) racks.

d. Fuel assemblies stored in Region 1 racks shall meet one of the following storage constraints.

1. Unirradiated fuel assemblies with a maximum enrichment of 4.25 w/o U-235 have unrestricted storage.

2. Unirradiated fuel assemblies with enrichments greater than 4.25 w/o U-235 and less than or equal to 5.0 w/o U-235, that do not contain Integral Fuel Burnable Absorber (IFBA) pins, may only be stored in the peripheral cells facing the concrete wall.

3. Unirradiated fuel assemblies with enrichments (E) greater than 4.25 w/o U-235 and less than or equal to 5.0 w/o U-235, that contain IFBA rods with a nominal 2.35 mg B-10/linear inch loading, and a number of IFBA rods equal to or greater than the number determined by the equation below, have unrestricted storage.

$$N = 42.67\ (E-4.25)$$

4. Irradiated fuel assemblies with enrichments (E) greater than 4.25 w/o U-235 and less than or equal to 5.0 w/o, that have attained the minimum burnup (BU) as determined by the equation below, have unrestricted storage.

   $$BU\ (MWD/kg\ U) = -26.212 + 6.1677E$$

e. Fuel assemblies stored in Region 2 racks shall meet one of the following storage constraints.

   1. Unirradiated fuel assemblies with a maximum enrichment of 5.0 w/o U-235 may be stored in a checkerboard pattern with intermediate cells containing only water or non-fissile bearing material.

   2. Unirradiated fuel assemblies with a maximum enrichment (E) of 5.0 w/o U-235 may be stored in the central cell of any 3x3 array of cells provided the surrounding eight cells are empty or contain fuel assemblies that have attained the minimum burnup (BU) as determined by the equation below.

      $$BU\ (MWD/kg\ U) = -15.48 + 17.80E - 0.7038E^2$$

      In this configuration, none of the nine cells in any 3x3 array shall be common to cells in any other similar 3x3 array. Along the rack periphery, the concrete wall is equivalent to 3 outer cells in a 3x3 array.

   3. Irradiated fuel assemblies with a maximum enrichment (E) of 5.0 w/o U-235 that have attained the minimum burnup (BU) as determined by the equation below, have unrestricted storage.

      $$BU\ (MWD/kg\ U) = -32.06 + 25.21E - 3.723E^2 + 0.3535E^3$$

   4. Irradiated fuel assemblies with a maximum enrichment (E) of 5.0 w/o U-235 that have attained the minimum burnup (BU) as determined by the equation below, may be stored in a peripheral cell facing the concrete wall.

      $$BU\ (MWD/kg\ U) = -25.56 + 15.14E - 0.602E^2$$

ATTACHMENT C

3/4.9.3 DECAY TIME

LIMITING CONDITION FOR OPERATION

3.9.3 The reactor shall be subcritical for at least 168 ~~100~~ hours.

APPLICABILITY: During movement of irradiated fuel in the reactor pressure vessel.

ACTION:

With the reactor subscritical for less than 168 ~~100~~ hours, suspend all operations involving movement of irradiated fuel in the reactor pressure vessel. The provisions of Specification 3.0.3 are not applicable.

SURVEILLANCE REQUIREMENTS

4.9.3 The reactor shall be determined to have been subcritical for at least 168 ~~100~~ hours by verification of the date and time of subcriticality prior to movement of irradiated fuel in the reactor pressure vessel.

5.5 METEOROLOGICAL TOWER LOCATION

5.5.1 The meteorological tower shall be located as shown on Figure 5.1-1.

5.6 FUEL STORAGE

CRITICALITY

5.6.1 The new and spent fuel storage racks are designed and shall be maintained with:

a. A Keff equivalent to less than or equal to 0.95 with the storage rack filled with unborated water. This value of keff includes a conservative allowance of:

   1. 2.2% delta k/k uncertainty for all standard and V5H fuel assemblies, and

   2. An additional 0.7% delta k/k uncertainty for standard and V5H fuel assemblies containing Integral Fuel Burnable Absorber (IFBA) pins.

b. A nominal 10.5 inch center-to-center distance between fuel assemblies placed in the spent fuel storage racks.

c. A nominal 21.0 inch center-to-center distance between fuel assemblies placed in the new fuel storage racks.

d. Standard or Vantage 5H fuel assemblies with maximum enrichment of 4.55 w/o U235 and a Kinf less than or equal to 1.453 in the core geometry at 68°F with no soluble boron.

REPLACE WITH INSERT 1

DRAINAGE

5.6.2 The spent fuel storage pool is designed and shall be maintained to prevent inadvertent draining of the pool below elevation 124'8".

CAPACITY

5.6.3 The spent fuel storage pool is designed and shall be maintained with a storage capacity limited to no more than ~~1170~~ 1632 fuel assemblies.

5.7 COMPONENT CYCLIC OR TRANSIENT LIMIT

5.7.1 The components identified in Table 5.7-1 are designed and shall be maintained within the cyclic or transient limits of Table 5.7-1.

INSERT 1

5.6.1.1 The new fuel storage racks are designed and shall be maintained with:

a. A maximum Keff equivalent of 0.95 with the storage racks flooded with unborated water.

b. A nominal 21.0 inch center-to-center distance between fuel assemblies.

c. A maximum unirradiated fuel assembly enrichment of 4.5 w/o U-235.

5.6.1.2 The spent fuel storage racks are designed and shall be maintained with:

a. A maximum Keff equivalent of 0.95 with the storage racks filled with unborated water.

b. A nominal 10.5 inch center-to-center distance between fuel assemblies stored in Region 1 (flux trap type) racks.

c. A nominal 9.05 inch center-to-center distance between fuel assemblies stored in Region 2 (non-flux trap) racks.

d. Fuel assemblies stored in Region 1 racks shall meet one of the following storage constraints.

1. Unirradiated fuel assemblies with a maximum enrichment of 4.25 w/o U-235 have unrestricted storage.

2. Unirradiated fuel assemblies with enrichments greater than 4.25 w/o U-235 and less than or equal to 5.0 w/o U-235, that do not contain Integral Fuel Burnable Absorber (IFBA) pins, may only be stored in the peripheral cells facing the concrete wall.

3. Unirradiated fuel assemblies with enrichments (E) greater than 4.25 w/o U-235 and less than or equal to 5.0 w/o U-235, that contain IFBA rods with a nominal 2.35 mg B-10/linear inch loading, and a number of IFBA rods equal to or greater than the number determined by the equation below, have unrestricted storage.

$$N = 42.67\ (E-4.25)$$

4. Irradiated fuel assemblies with enrichments (E) greater than 4.25 w/o U-235 and less than or equal to 5.0 w/o, that have attained the minimum burnup (BU) as determined by the equation below, have unrestricted storage.

   $$BU\ (MWD/kg\ U) = -26.212 + 6.1677E$$

e. Fuel assemblies stored in Region 2 racks shall meet one of the following storage constraints.

   1. Unirradiated fuel assemblies with a maximum enrichment of 5.0 w/o U-235 may be stored in a checkerboard pattern with intermediate cells containing only water or non-fissile bearing material.

   2. Unirradiated fuel assemblies with a maximum enrichment (E) of 5.0 w/o U-235 may be stored in the central cell of any 3x3 array of cells provided the surrounding eight cells are empty or contain fuel assemblies that have attained the minimum burnup (BU) as determined by the equation below.

      $$BU\ (MWD/kg\ U) = -15.48 + 17.80E - 0.7038E^2$$

      In this configuration, none of the nine cells in any 3x3 array shall be common to cells in any other similar 3x3 array. Along the rack periphery, the concrete wall is equivalent to 3 outer cells in a 3x3 array.

   3. Irradiated fuel assemblies with a maximum enrichment (E) of 5.0 w/o U-235 that have attained the minimum burnup (BU) as determined by the equation below, have unrestricted storage.

      $$BU\ (MWD/kg\ U) = -32.06 + 25.21E - 3.723E^2 + 0.3535E^3$$

   4. Irradiated fuel assemblies with a maximum enrichment (E) of 5.0 w/o U-235 that have attained the minimum burnup (BU) as determined by the equation below, may be stored in a peripheral cell facing the concrete wall.

      $$BU\ (MWD/kg\ U) = -25.56 + 15.14E - 0.602E^2$$

ATTACHMENT D