3.0 LIMITING CONDITIONS FOR OPERATION	4.0 SURVEILLANCE REQUIREMENTS

E. Reactor Building Ventilation Isolation and Standby Gas Treatment System Initiation

1. a. Except as specified in 3.2.E.1.b below, four radiation monitors shall be operable at all times.

   b. One of the two monitors in the ventilation plenum and one of the two radiation monitors on the refueling floor may be inoperable for 24 hours. If the inoperable monitors are not restored to service in this time, the reactor building ventilation system shall be isolated and the standby gas treatment system operated until repairs are complete.

2. The radiation monitors shall be set to trip as follows:

   (a) ventilation plenum $\leq$ 3 mr/hr
   (b) refueling floor $\leq$100 mr/hr

3. When irradiated fuel is in the reactor vessel and the reactor water temperature is above 212°F, the limiting conditions for operation for the instrumentation listed in Table 3.2.4 shall be met.

Each batch to be released will conform to 10 CFR Part 20 release limits on an instantaneous basis, i.e., annual averaging will not be used as permitted by 10 CFR Part 20. See Section 9.2.3 of the FSAR. The radioactivity level in the discharge canal for a given release of waste will be the highest when the discharge canal flow is lowest. This occurs during "closed cycle" cooling tower operation at which time the cooling tower blowdown of approximately 36 cubic feet per second is the major flow in the discharge canal. The rate of pumping the radwaste effluent into the discharge canal is variable and can, therefore, be controlled to maintain the concentration within the specified limit. This type of operation will be employed only when the river flow is very low and will result in further dilution between discharge canal effluent and the river.

D. Radioactive Liquid Storage

The waste sample, floor drain sample, waste surge, and condensate storage tanks are not contained in a Class I structure. The maximum gross radioactivity in liquid storage in the specified tanks has been limited on the basis of an accidental spill from all stated tanks due to a seismic event great enough to damage them. Assuming a low recorded river flow of 1000 ft^3/sec, a day period over which the radioactive liquid wastes are diluted in the river, and consumption of the water by individuals at standard man consumption rate (3000 ml/day), the single intake by an individual would not exceed one-third the yearly intake allowable by 10 CFR Part 20 for unidentified radioisotopes (1×10^{-7} uCi/ml). The factor of 3 was applied to 10 CFR Part 20 limits as recommended for situations in which population groups could be exposed.

The sampling frequency has been established so that if the maximum amount of gross radioactivity is exceeded, action can be taken to reduce the radioactivity to a level below the specified limit.

E. Augmented Off-Gas System

The hydrogen monitors are used to detect possible hydrogen buildups which could result in a possible hydrogen explosion. Isolation of the off-gas flow would prevent the hydrogen explosion and possible damage to the augmented off-gas system.

Experience has shown that a daily check with monthly testing and quarterly calibration assures proper operation of the hydrogen monitors and quarterly calibration assures proper operation of the radiation monitors.

The maximum gross radioactivity in one gas decay tank has been limited on the basis that accidental release of its contents to the environs by operator error after 12 hours decay should not result in exceeding the dose equivalent to the maximum quarterly release rate specified in Specification 3.8.A.2. Staff analysis of an elevated release under accident meteorology for a minimum release period of 8 hours indicated a release of 22,000 curies of Xe-133 or the dose equivalent would result in a whole body dose of 20 mRem at the nearest site boundary.