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- Y. Shutdown - The reactor is in a shutdown condition when the reactor mode switch is in the shutdown mode position and no core alterations are being performed. In this condition, a reactor scram is initiated and a rod block is inserted directly from the mode switch. The scram can be reset after a short time delay.
  - 1. Hot Shutdown means conditions as above with reactor coolant temperature greater than 212°F.
  - 2. Cold Shutdown means conditions as above with reactor coolant temperature equal to or less than 212°F.
- Z. Simulated Automatic Actuation - Simulated automatic actuation means applying a simulated signal to the sensor to actuate the circuit in question.
- AA. Transition Boiling - Transition boiling means the boiling regime between nucleate and film boiling, also referred to as partial nucleate boiling. Transition boiling is the regime in which both nucleate and film boiling occur intermittently with neither type being completely stable.
- AB. Pressure Boundary Leakage - Pressure boundary leakage shall be leakage through a non-isolable fault in the reactor coolant system pressure boundary.
- AC. Identified Leakage - Identified leakage shall be:
  - 1) Reactor coolant leakage into drywell collection systems, such as pump seal or valve packing leaks, that is captured and conducted to a sump or collecting tank, or
  - 2) Reactor coolant leakage into the drywell atmosphere from sources which are specifically located and known not to be Pressure Boundary Leakage or which do not significantly impair the methods used to detect reactor coolant leakage.
- AD. Unidentified Leakage - Unidentified leakage shall be all reactor coolant leakage which is not Identified Leakage.
- AE. through AH. (Deleted)
- AI. Purging - Purging is the controlled process of discharging air or gas from a confinement to maintain temperature, pressure, humidity, concentration, or other operating condition, in such a manner that replacement air or gas is required to purify the confinement.
- AJ. Venting - Venting is the controlled process of discharging air or gas from a confinement to maintain temperature, pressure, humidity, concentration, or other operating condition, in such a manner that replacement air or gas is not provided or required.

- AK. Dose Equivalent I-131 - Dose Equivalent I-131 is the concentration of I-131 (microcuries/gram) which alone would produce the same thyroid dose as the quantity and isotopic mixture of I-131, I-132, I-133, I-134 and I-135 actually present. The thyroid dose conversion factors used for this calculation shall be those listed in Table III of TID-14844, "Calculation of Distance Factors for Power and Test Reactor Sites" or in NRC Regulatory Guide 1.109, Rev 1, October, 1977.
- AL. through AP. (Deleted)
- AQ. Core Operating Limits Report The Core Operating Limits Report is the unit specific document that provides core operating limits for the current operating reload cycle. These cycle-specific operating limits shall be determined for each reload cycle in accordance with Specification 6.7.A.7. Plant operation within these operating limits is addressed in individual specifications.
- AR. Allowable Value - The Allowable Value is the limiting value of the sensed process variable at which the trip setpoint may be found during instrument surveillance.

### 3.0 LIMITING CONDITIONS FOR OPERATION

#### 3.8 MAIN CONDENSER OFFGAS

Applicability:

Applies to the radioactive release rate from the steam jet air ejectors.

Objective:

To limit the doses received at the site boundary from main condenser offgas in the event that effluent is discharged with less than full treatment.

Specification:

A. Main Condenser Offgas Activity

1. The gross gamma radioactivity release rate measured at the steam jet air ejector shall be limited to  $\leq 2.6 \times 10^5$  uci/sec following a 30-minute decay.
2. When the limit in 1 above is exceeded, restore the gross gamma radioactivity release rate to within the limit within 72 hours or be in at least hot shutdown within the next 12 hours.
3. The activity of radioactive material in gaseous form removed from the main condenser shall be continuously monitored by the steam jet air ejector monitors in accordance with Table 3.8.1.

### 4.0 SURVEILLANCE REQUIREMENTS

#### 4.8 MAIN CONDENSER OFFGAS

Applicability:

Applies to the sampling and monitoring of radioactive effluents discharged from the steam jet air ejectors and verification of equipment operability.

Objective:

To limit the doses received at the site boundary from main condenser offgas in the event that effluent is discharged with less than full treatment.

Specification:

A. Main Condenser Offgas Activity

1. The gross gamma radioactivity of noble gases from the main condenser air ejector shall be determined to be within the limit specified in 3.8.A.1 at the following times by performing an isotopic analysis of a representative sample of gases:
  - a. Once every month.
  - b. Within 24 hours following an increase in the continuous monitor reading of 50% after factoring out increases due to power level.

**3.0 LIMITING CONDITIONS FOR OPERATION**

4. The steam jet air ejector monitors shall be set to automatically terminate offgas flow within 30 minutes at the limit established in Specification 3.8.A.1.

**4.0 SURVEILLANCE REQUIREMENTS**

2. Surveillance of main condenser offgas instruments shall be performed as required by Table 4.8.1.

TABLE 3.8.1 - MAIN CONDENSER OFFGAS INSTRUMENTATION

Instrument	Minimum Channels Operable	Applicability	Action if Minimum Channels not Operable
Main Condenser Air Ejector Noble Gas Activity Monitor	2	During air ejector operation	From and after the date that one of the two steam jet air ejector off-gas radiation monitors is made or found to be inoperable, continued reactor power operation is permissible provided the inoperable radiation monitor instrument channel is tripped. Upon loss of both steam jet air ejector off-gas radiation monitors, be in Hot Standby within six hours.

TABLE 4.8.1 MAIN CONDENSER OFFGAS INSTRUMENTATION SURVEILLANCE REQUIREMENTS

Instrument	Sensor Check Frequency	Source Check Frequency	Functional Test Frequency	Calibration Frequency
Main Condenser Air Ejector Noble Gas Activity Monitors	Daily during air ejector operation	-	Quarterly	Once Each Operating Cycle

Bases 3.8/4.8:

A. Main Condenser Offgas Activity

Specification 3.8.A.1 establishes a maximum activity at the steam jet air ejector. Restricting the gross radioactivity rate of noble gases from the main condenser provides reasonable assurance that the total body exposure to an individual at the restricted area boundary will not exceed the limits of 10 CFR Part 20 in the event this effluent is inadvertently discharged directly to the environment with minimal treatment. This specification implements the requirements of General Design Criteria 60 and 64 of Appendix A to 10 CFR Part 50.

### Bases 3.11 (Continued):

This limit was determined based upon bounding analyses for the limiting transient at the given core power level.

At thermal power levels less than or equal to 25% of rated thermal power, operating plant experience indicates that the resulting MCPR value is in excess of requirements by a considerable margin. MCPR evaluation below this power level is therefore unnecessary. The daily requirement for calculating MCPR above 25% of rated thermal power is sufficient since power distribution shifts are very slow when there have not been significant power or control rod changes.

Those abnormal operational transients, analyzed in FSAR Section 14.5, which result in an automatic reactor scram are not considered a violation of the LCO. Exceeding MCPR limits in such cases need not be reported.

### References

1. "General Electric Company Analytical Model for Loss-of-Coolant Analysis in Accordance with 10 CFR 50, Appendix K", NEDE-20566, November, 1975.
2. "Loss-of-Coolant Accident Analysis Report for the Monticello Nuclear Generating Plant", NEDO-24050-1, December, 1980, L O Mayer (NSP) to Director of Nuclear Reactor Regulation (USNRC), February 6, 1981.

### Bases 4.11

The APLHGR, LHGR and MCPR shall be checked daily to determine if fuel burnup, or control rod movement have caused changes in power distribution. Since changes due to burnup are slow, and only a few control rods are removed daily, a daily check of power distribution is adequate. For a limiting value to occur below 25% of rated thermal power, an unreasonably large peaking factor would be required, which is not the case for operating control rod sequences. In addition, the MCPR is checked whenever changes in the core power level or distribution are made which have the potential of bringing the fuel rods to their thermal-hydraulic limits.

Bases 3.15/4.15:

A program of inservice testing of Quality Group A, B, and C pumps and valves is in effect at the Monticello plant that conforms to the requirements contained in Section XI of the ASME Boiler and Pressure Vessel Code or where alternate testing is justified in accordance with Generic Letter 89-04. If a Code required inspection is impractical for the Monticello facility, a request for a deviation from that requirement is submitted to the Commission in accordance with 10 CFR 50, Section 50.55a(g)(6)(i).

## 6.5 Plant Operating Procedures

Detailed written procedures, including the applicable check-off lists and instructions, covering areas listed below shall be prepared and followed. These procedures and changes thereto, except as specified in 6.5.G shall be reviewed by the Operations Committee and approved by a member of plant management designated by the plant manager.

### A. Plant Operations

1. Integrated and system procedures for normal startup, operation and shutdown of the reactor and all systems and components involving nuclear safety of the facility.
2. Fuel handling operations.
3. Actions to be taken to correct specific and foreseen potential or actual malfunction of systems or components including responses to alarms, primary system leaks and abnormal reactivity changes and including follow-up actions required after plant protective system actions have initiated.
4. Surveillance and testing requirements that could have an effect on nuclear safety.
5. Implementing procedures of the emergency plan, including procedures for coping with emergency conditions involving potential or actual releases of radioactivity.
6. Implementing procedures of the fire protection program.
7. Quality assurance for effluent and environmental monitoring.
8. All programs specified in Specification 6.8.

Drills on the procedures specified in A.3 above shall be conducted as a part of the retraining program. Drills on the procedures specified in A.5 above shall be conducted at least semi-annually, including a check of communications with offsite support groups.

### B. (Deleted)

C. Maintenance and Test

The following maintenance and test procedures will be developed to satisfy routine inspection, preventive maintenance programs, and operating license requirements:

1. Routine testing of Engineered Safeguards and equipment as required by the facility license and the Technical Specifications.
2. Routine testing of standby and redundant equipment.
3. Preventive or corrective maintenance of plant equipment and systems that could have an effect on nuclear safety.
4. Calibration and preventive maintenance of instrumentation that could affect the nuclear safety of the plant.
5. Special testing of equipment for proposed changes to operational procedures or proposed system design changes.

D. (Deleted)

E. (Deleted)

F. Security

Procedures shall be developed to implement the requirements of the Security Plan and the Security Contingency Plan. These implementing procedures, with the exception of those non-safety related procedures governing work activities exclusively applicable to or performed by security personnel, shall be reviewed by the Operations Committee and approved by a member of plant management designated by the plant manager. Security procedures not reviewed by the Operations Committee shall be reviewed and approved by the security manager.

G. Temporary Changes to Procedures

Temporary changes to those procedures which are required to be reviewed by the Operations Committee described in A, C and F above, which do not change the intent of the original procedures may be made with the concurrence of two members of the unit management staff, at least one of whom holds a Senior Operator License. Such changes should be documented, reviewed by the Operations Committee and approved by a member of plant management designated by the Plant Manager within one month. Temporary changes to security procedures not reviewed by the Operations Committee shall be reviewed by the security manager for security procedures.

6.6 Plant Operating Records

A. Records Retained for Five Years

Records and logs relative to the following items shall be retained for a minimum of five years:

1. Normal plant operation including such items as power level, periods of operation at each level, fuel exposure and shutdowns.
2. Written shift supervisory and reactor logs.
3. Periodic checks, inspections, tests and calibrations of components and systems, as related to these Technical Specifications.
4. Reviews of changes made to procedures or equipment and reviews of tests and experiments.
5. Principal maintenance activities, including inspection, repairs and substitution or replacement of principal items of equipment pertaining to nuclear safety.
6. Records of changes to plant procedures and records of specials tests and experiments.
7. Records of wind speed and direction.

8. Records of individual plant staff members showing qualifications, training and retraining.
9. Reportable Occurrences.

**B. Records Retained for Plant Life**

Records and logs relative to the following items shall be retained for the life of the plant:

1. Liquid and gaseous radioactive releases to the environs
2. Radiation exposures for all plant, visitor and contractor personnel
3. Offsite environmental monitoring surveys
4. Fuel accountability including new and spent fuel inventories and transfers, and fuel assembly histories
5. Radioactive shipments
6. Plant radiation and contamination surveys
7. Changes made to the plant as it is described in the Final Safety Analysis Report, reflected in updated, corrected and as-built drawings
8. Cycling beyond normal limits for those components that have been designed to operate safely for a limited number of cycles beyond such limits
9. Reactor coolant system in-service inspections
10. Minutes of meetings of the Safety Audit Committee
11. Records of the service lives of all safety-related snubbers, including the date at which the service life commences and associated installation and maintenance records.

2. Occupational Radiation Exposure Report

A tabulation on an annual basis of the number of station, utility, and other personnel (including contractors) for whom monitoring was performed, receiving an annual deep dose equivalent > 100 mrem and the associated collective deep dose equivalent (reported in person - rem) according to work and job functions (e.g., reactor operations and surveillance, inservice inspection, routine maintenance, special maintenance, waste processing, and refueling). This tabulation supplements the requirements of 10 CFR 20.2206. The dose assignments to various duty functions may be estimated based on pocket ionization chamber, thermoluminescence dosimeter (TLD), electronic dosimeter, or film badge measurements. Small exposures totaling < 20 percent of the individual total dose need not be accounted for. In the aggregate, at least 80 percent of the total deep dose equivalent received from external sources should be assigned to specific major work functions. The report covering the previous calendar year shall be submitted by April 30 of each year.

3. Monthly Operating Report. A monthly report of operating statistics and shutdown experience covering the previous month shall be submitted by the 15th of the following month.

4. Radioactive Effluent Release Report

The Radioactive Effluent Release Report covering the operation of the unit during the previous year shall be submitted prior to May 15 of each year in accordance with 10 CFR 50.36a. The report shall include a summary of the quantities of radioactive liquid and gaseous effluents and solid waste released from the unit. The material provided shall be consistent with the objectives outlined in the ODCM and in conformance with 10 CFR 50.36a and 10 CFR Part 50, Appendix I, Section IV.B.1.

5. (Deleted)

6. Report of Safety/Relief Valve Failures and Challenges. An annual report of safety/relief valve failures and challenges shall be submitted prior to March 1st of each year.

7. Core Operating Limits Report

- a. Core operating limits shall be established and documented in the Core Operating Limits Report before each reload cycle or any remaining part of a reload cycle for the following:

Rod Block Monitor Operability Requirements (Specification 3.2.C.2a)  
Rod Block Monitor Upscale Trip Settings (Table 3.2.3, Item 4.a)  
Recirculation System Power to Flow Map Stability Regions (Specification 3.5.F)  
Maximum Average Planar Linear Heat Generation Rate Limits (Specification 3.11.A)  
Linear Heat Generation Rate Limits (Specification 3.11.B)  
Minimum Critical Power Ratio Limits (Specification 3.11.C)  
Power to Flow Map (Bases 2.3.A)

- b. The analytical methods used to determine the core operating limits shall be those previously reviewed and approved by the NRC, specifically those described in the following documents:

NEDE-24011-P-A, "General Electric Standard Application for Reactor Fuel" (the approved version at the time the reload analyses are performed)

NSPNAD-8608-A, "Reload Safety Evaluation Methods for Application to the Monticello Nuclear Generating Plant" (the approved version at the time the reload analyses are performed)

NSPNAD-8609-A, "Qualification of Reactor Physics Methods for Application to Monticello" (the approved version at the time the reload analyses are performed)

NEDO-31960, "BWR Owners' Group Long-Term Stability Solutions Licensing Methodology," June 1991 (the approved version at the time the reload analyses are performed)

NEDO-31960, Supplement 1, "BWR Owners' Group Long-Term Stability Solutions Licensing Methodology," March 1992 (the approved version at the time the reload analyses are performed)

- c. The core operating limits shall be determined such that all applicable limits (e.g., fuel thermal-mechanical limits, core thermal-hydraulic limits, ECCS limits, nuclear limits such as shutdown margin, transient analysis limits and accident analysis limits) of the safety analysis are met.
- d. The Core Operating Limits Report, including any mid-cycle revisions or supplements, shall be supplied upon issuance, for each reload cycle, to the NRC Document Control Desk with copies to the Regional Administrator and Resident Inspector.

B. Reportable Events

The following actions shall be taken for Reportable Events:

- a. The Commission shall be notified by a report submitted pursuant to the requirements of Section 50.73 to 10 CFR Part 50 and,
- b. Each Reportable Event shall be reviewed by the Operations Committee and the results of this review shall be submitted to the Safety Audit Committee and the corporate officer with direct responsibility for the plant.

C. Environmental Reports

1. Annual Radiological Environmental Operating Report

The Annual Radiological Environmental Operating Report covering the operation of the unit during the previous calendar year shall be submitted by May 15 of each year. The report shall include summaries, interpretations, and analyses of trends of the results of the Radiological Environmental Monitoring Program for the reporting period. The material provided shall be consistent with the objectives outlined in the Offsite Dose Calculation Manual (ODCM), and in 10 CFR 50, Appendix I, Sections IV.B.2, IV.B.3, and IV.C.

The Annual Radiological Environmental Operating Report shall include the results of analyses of all radiological environmental samples and of all environmental radiation measurements taken during the period pursuant to the locations specified in the table and figures in the ODCM, as well as summarized and tabulated results of these analyses and measurements in the format of the table in the Radiological Assessment Branch Technical Position, Revision 1, November 1979. In the event that some individual results are not available for inclusion with the report, the report shall be submitted noting and explaining the reasons for the missing results. The missing data shall be submitted in a supplementary report as soon as possible.

2. (Deleted)

3. Other Environmental Reports (non-radiological, non-aquatic)

- a. Environmental events that indicate or could result in a significant environmental impact causally related to plant operation. The following are examples: excessive bird impactation; onsite plant or animal disease outbreaks; unusual mortality of any species protected by Endangered Species Act of 1973; increase in nuisance organisms or conditions; or excessive environmental impact caused by herbicide application to transmission corridors associated with the plant. This report shall be submitted within 30 days of the event and shall (a) describe, analyze, and evaluate the event, including extent and magnitude of the impact and plant operating characteristics, (b) describe the probable cause of the event, (c) indicate the action taken to correct the reported event, (d) indicate the corrective action taken to preclude repetition of the event and to prevent similar occurrences involving similar components or systems, and (e) indicate the agencies notified and their preliminary responses.
- b. Proposed changes, tests or experiments which may result in a significant increase in any adverse environmental impact which was not previously reviewed or evaluated in the Final Environmental Statement or supplements thereto. This report shall include an evaluation of the environmental impact of the proposed activity and shall be submitted 30 days prior to implementing the proposed change, test or experiment.

D. Special Reports

Unless otherwise indicated, special reports required by the Technical Specification shall be submitted within the time period specified for each report.

## 6.8 Programs and Manuals

### A. Offsite Dose Calculation Manual (ODCM)

1. The ODCM shall contain the methodology and parameters used in the calculation of offsite doses resulting from radioactive gaseous and liquid effluents, in the calculation of gaseous and liquid effluent monitoring alarm and trip setpoints, and in the conduct of the radiological environmental monitoring program; and
2. The ODCM shall also contain the radioactive effluent controls and radiological environmental monitoring activities and descriptions of the information that should be included in the Annual Radiological Environmental Operating, and Radioactive Effluent Release Reports, required by Specification 6.7.C.1 and Specification 6.7.A.4.
3. Licensee initiated changes to the ODCM:
  - a. Shall be documented and records of reviews performed shall be retained. This documentation shall contain:
    - 1) sufficient information to support the change(s) together with the appropriate analyses or evaluations justifying the change(s), and
    - 2) a determination that the change(s) maintain the levels of radioactive effluent control required by 10 CFR 20.1302, 40 CFR 190, 10 CFR 50.36a, and 10 CFR 50, Appendix I, and not adversely impact the accuracy or reliability of effluent, dose, or setpoint calculations;
  - b. Shall become effective after the approval of the plant manager; and
  - c. Shall be submitted to the NRC in the form of a complete, legible copy of the entire ODCM as a part of or concurrent with the Radioactive Effluent Release Report for the period of the report in which any change in the ODCM was made. Each change shall be identified by markings in the margin of the affected pages, clearly indicating the area of the page that was changed, and shall indicate the date (i.e., month and year) the change was implemented.

B. Primary Coolant Sources Outside Containment

This program provides controls to minimize leakage from those portions of systems outside containment that could contain highly radioactive fluids during a serious transient or accident to levels as low as practicable. The systems include Core Spray, High Pressure Coolant Injection, Residual Heat Removal, Reactor Core Isolation Cooling, Combustible Gas Control, process sampling, and Standby Gas Treatment. The program shall include the following:

1. Preventive maintenance and periodic visual inspection requirements; and
2. Integrated leak test requirements for each system at refueling cycle intervals or less.

The provisions of Specification 4.0.B are applicable.

A program acceptable to the Commission was described in a letter dated December 31, 1979, from L O Mayer, NSP, to Director of Nuclear Reactor Regulation, "Lessons Learned Implementation."

C. Post Accident Sampling

This program provides controls that ensure the capability to obtain and analyze reactor coolant, radioactive gases, and particulates in plant gaseous effluents and containment atmosphere samples under accident conditions. The program shall include the following:

1. Training of personnel;
2. Procedures for sampling and analysis; and
3. Provisions for maintenance of sampling and analysis equipment.

D. Radioactive Effluent Controls Program

This program conforms to 10 CFR 50.36a for the control of radioactive effluents and for maintaining the doses to members of the public from radioactive effluents as low as reasonably achievable. The program shall be contained in the ODCM, shall be implemented by procedures, and shall include remedial actions to be taken whenever the program limits are exceeded. The program shall include the following elements:

1. Limitations on the functional capability of radioactive liquid and gaseous monitoring instrumentation including surveillance tests and setpoint determination in accordance with the methodology in the ODCM;
2. Limitations on the concentrations of radioactive material released in liquid effluents to unrestricted areas, conforming to ten times the concentration values in Appendix B, Table 2, Column 2 to 10 CFR 20.1001-20.2402;
3. Monitoring, sampling, and analysis of radioactive liquid and gaseous effluents in accordance with 10 CFR 20.1302 and with the methodology and parameters in the ODCM;
4. Limitations on the annual and quarterly doses or dose commitment to a member of the public from radioactive materials in liquid effluents released from the site to unrestricted areas, conforming to 10 CFR 50, Appendix I;
5. Determination of cumulative and projected dose contributions from radioactive effluents for the current calendar quarter and current calendar year in accordance with the methodology and parameters in the ODCM at least monthly;
6. Limitations on the functional capability and use of the liquid and gaseous effluent treatment systems to ensure that appropriate portions of these systems are used to reduce releases of radioactivity when the projected doses in a period of 31 days would exceed 2% of the guidelines for the annual dose or dose commitment, conforming to 10 CFR 50, Appendix I;
7. Limitations on the dose rate resulting from radioactive material released in gaseous effluents from the site to areas at or beyond the site boundary shall be in accordance with the following:
  - a. For noble gases: a dose rate of  $\leq 500$  mrem/yr to the whole body and a dose rate of  $\leq 3000$  mrem/yr to the skin, and
  - b. For iodine-131, iodine-133, tritium, and all radionuclides in particulate form with half-lives greater than 8 days: a dose rate  $\leq 1500$  mrem/yr to any organ;

8. Limitations on the annual and quarterly air doses resulting from noble gases released in gaseous effluents from the site to areas at or beyond the site boundary, conforming to 10 CFR 50, Appendix I.
9. Limitations on the annual and quarterly doses to a member of the public from iodine-131, iodine-133, tritium, and all radionuclides in particulate form with half lives > 8 days in gaseous effluents released from the site to areas beyond the site boundary, conforming to 10 CFR 50, Appendix I;
10. Limitations on the annual dose or dose commitment to any member of the public, beyond the site boundary, due to releases of radioactivity and to radiation from uranium fuel cycle sources, conforming to 40 CFR 190; and
11. Limitations on venting and purging of the containment through the Standby Gas Treatment System to maintain releases as low as reasonably achievable.

The provisions of Specifications 4.0.B, 4.0.D and 4.0.E are applicable to the Radioactive Effluent Controls Program surveillance frequency.

6.8.E through 6.8.H - RESERVED

I. Explosive Gas and Storage Tank Radioactivity Monitoring Program

This program provides controls for potentially explosive gas mixtures contained in the Offgas Treatment System, the quantity of radioactivity contained in gas storage tanks or fed into the offgas treatment system, and the quantity of radioactivity contained in unprotected outdoor liquid storage tanks. The quantity of radioactivity after 12 hours holdup contained in each gas storage tank shall be limited to  $\leq 22,000$  curies of noble gases (considered as dose equivalent Xe-133). The quantity of liquid radioactive material contained in each outside temporary tank shall be limited to  $\leq 10$  curies, excluding tritium and dissolved or entrained noble gases.

The program shall include:

1. The limits for concentrations of hydrogen and oxygen in the Offgas Treatment System and a surveillance program to ensure the limits are maintained. Such limits shall be appropriate to the system's design criteria (i.e., whether or not the system is designed to withstand a hydrogen explosion);
2. A surveillance program to ensure that the quantity of radioactivity contained in each gas storage tank and fed into the offgas treatment system is less than the amount that would result in a whole body exposure of  $\geq 0.5$  rem to any individual in an unrestricted area, in the event of an uncontrolled release of the tanks' contents; and
3. A surveillance program to ensure that the quantity of radioactivity contained in all outdoor liquid radwaste tanks that are not surrounded by liners, dikes, or walls, capable of holding the tanks' contents and that do not have tank overflows and surrounding area drains connected to the Liquid Radwaste Treatment System is less than the amount that would result in concentrations less than the limits of 10 CFR 20, Appendix B, Table 2, Column 2, at the nearest potable water supply and the nearest surface water supply in an unrestricted area, in the event of an uncontrolled release of the tanks' contents.

The provisions of Specifications 4.0.B, 4.0.D and 4.0.E are applicable to the Explosive Gas and Storage Tank Radioactivity Monitoring Program surveillance frequencies.

6.8.J - RESERVED

K. Technical Specifications (TS) Bases Control Program

This program provides a means for processing changes to the Bases of these Technical Specifications.

1. Changes to the Bases of the TS shall be made under appropriate administrative controls and reviews.
2. Changes to Bases may be made without prior NRC approval provided the changes do not involve either of the following:
  - a. a change in the TS incorporated in the license; or
  - b. a change to the USAR or Bases that requires NRC approval pursuant to 10 CFR 50.59.
3. The Bases Control Program shall contain provisions to ensure that the Bases are maintained consistent with the USAR.
4. Proposed changes to the Bases that involve changes as described in a. or b. of Specification 6.8.K.2 above shall be reviewed and approved by the NRC prior to implementation. Changes to the Bases implemented without prior NRC approval shall be provided to the NRC on a frequency consistent with 10 CFR 50.71(e).

## 6.9 High Radiation Area

As provided in paragraph 20.1601(c) of 10 CFR Part 20, the following controls shall be applied to high radiation areas in place of the controls required by paragraph 20.1601(a) and (b) of 10 CFR Part 20:

- A. High Radiation Areas with Dose Rates Not Exceeding 1.0 rem/hour at 30 centimeters from the Radiation Source or from any Surface Penetrated by the Radiation
1. Each entryway to such an area shall be barricaded and conspicuously posted as a high radiation area. Such barricades may be opened as necessary to permit entry or exit of personnel or equipment.
  2. Access to, and activities in, each such area shall be controlled by means of Radiation Work Permit (RWP) or equivalent that includes specification of radiation dose rates in the immediate work area(s) and other appropriate radiation protection equipment and measures.
  3. Individuals qualified in radiation protection procedures and personnel continuously escorted by such individuals may be exempted from the requirement for an RWP or equivalent while performing their assigned duties provided that they are otherwise following plant radiation protection procedures for entry to, exit from, and work in such areas.
  4. Each individual or group entering such an area shall possess:
    - a. A radiation monitoring device that continuously displays radiation dose rates in the area, or
    - b. A radiation monitoring device that continuously integrates the radiation dose rates in the area and alarms when the device's dose alarm setpoint is reached, with an appropriate alarm setpoint, or
    - c. A radiation monitoring device that continuously transmits dose rate and cumulative dose information to a remote receiver monitored by radiation protection personnel responsible for controlling personnel radiation exposure within the area, or

d. A self-reading dosimeter (e.g., pocket ionization chamber or electronic dosimeter) and,

- 1) Be under the surveillance, as specified in the RWP or equivalent, while in the area, of an individual qualified in radiation protection procedures, equipped with a radiation monitoring device that continuously displays radiation dose rates in the area; who is responsible for controlling personnel exposure within the area, or
  - 2) Be under the surveillance as specified in the RWP or equivalent, while in the area, by means of closed circuit television, of personnel qualified in radiation protection procedures, responsible for controlling personnel radiation exposure in the area, and with the means to communicate with individuals in the area who are covered by such surveillance.
5. Except for individuals qualified in radiation protection procedures, or personnel continuously escorted by such individuals, entry into such areas shall be made only after dose rates in the area have been determined and entry personnel are knowledgeable of them. These continuously escorted personnel will receive a pre-job briefing prior to entry into such areas. This dose rate determination, knowledge, and pre-job briefing does not require documentation prior to initial entry.

B. High Radiation Areas with Dose Rates Greater than 1.0 rem/hour at 30 centimeters from the Radiation Source or from any Surface Penetrated by the Radiation, but less than 500 rads/hour at 1 meter from the Radiation Source or from any Surface Penetrated by the Radiation

1. Each entryway to such an area shall be conspicuously posted as a high radiation area and shall be provided with a locked or continuously guarded door or gate that prevents unauthorized entry, and, in addition:
  - a. All such door and gate keys shall be maintained under the administrative control of the shift supervisor, radiation protection manager, or his or her designee.
  - b. Doors and gates shall remain locked except during periods of personnel or equipment entry or exit.
2. Access to, and activities in, each such area shall be controlled by means of an RWP or equivalent that includes specification of radiation dose rates in the immediate work area(s) and other appropriate radiation protection equipment and measures.

3. Individuals qualified in radiation protection procedures may be exempted from the requirement for an RWP or equivalent while performing radiation surveys in such areas provided that they are otherwise following plant radiation protection procedures for entry to, exit from, and work in such areas.
4. Each individual or group entering such an area shall possess:
  - a. A radiation monitoring device that continuously integrates the radiation dose rates in the area and alarms when the device's dose alarm setpoint is reached, with an appropriate alarm setpoint, or
  - b. A radiation monitoring device that continuously transmits dose rate and cumulative dose information to a remote receiver monitored by radiation protection personnel responsible for controlling personnel radiation exposure within the area with the means to communicate with and control every individual in the area, or
  - c. A self-reading dosimeter (e.g., pocket ionization chamber or electronic dosimeter) and,
    - 1) Be under surveillance, as specified in the RWP or equivalent, while in the area, of an individual qualified in radiation protection procedures, equipped with a radiation monitoring device that continuously displays radiation dose rates in the area; who is responsible for controlling personnel exposure within the area, or
    - 2) Be under the surveillance as specified in the RWP or equivalent, while in the area, by means of closed circuit television, of personnel qualified in radiation protection procedures, responsible for controlling personnel radiation exposure in the area, and with the means to communicate with and control every individual in the area.
  - d. In those cases where options b. and c. above are impractical or determined to be inconsistent with the "As Low As is Reasonably Achievable" principle, a radiation monitoring device that continuously displays radiation dose rates in the area.
5. Except for individuals qualified in radiation protection procedures, or personnel continuously escorted by such individuals, entry into such areas shall be made only after dose rates in the area have been determined and entry personnel are knowledgeable of them. These continuously escorted personnel will receive a pre-job briefing prior to entry into such areas. This dose rate determination, knowledge, and pre-job briefing does not require documentation prior to initial entry.

6. Such individual areas that are within a larger area where no enclosure exists for the purpose of locking and where no enclosure can reasonably be constructed around the individual area need not be controlled by a locked door or gate, nor continuously guarded, but shall be barricaded, conspicuously posted, and a clearly visible flashing light shall be activated at the area as a warning device.