

LICENSE AMENDMENT REQUESTS DATED October 17, 1994

Change Radioactive Effluent
Report Submittal from Semiannual to Annual

EXHIBIT B

Appendix A, Technical Specification Pages
Marked Up Pages

TS.4.10-2
TABLE TS.4.17-3 (Pg 4 of 4)
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TS.6.5-3
TS.6.5-4
TS.6.7-3

5. Although deviations from the required sampling schedule are permitted under Paragraph 3 above, whenever milk or leafy green vegetables can no longer be obtained from the designated sample locations required by Table 4.10-1, the ~~Semia~~Annual Radioactive Effluent ~~Release~~ Report for this period shall explain why the samples can no longer be obtained and will identify the new locations which will be added to and deleted from the monitoring program as soon as practicable.

B. Land Use Census

1. A land use census shall be conducted and shall identify the location of the nearest milk animal, the nearest residence, and the nearest garden of greater than 500 square feet producing fresh leafy vegetables in each of the 16 meteorological sectors within a distance of five miles. This census shall be conducted at least once per 12 months between the dates May 1 and October 31 by door to door survey, aerial survey, or by consulting local agricultural authorities or associations.
2. With a land use census identifying a location(s) which yields a calculated dose or dose commitment (via the same exposure pathway) 20 percent greater than at a location from which samples are currently being obtained in accordance with Specification 4.10-A.1, the ~~Semia~~Annual Radioactive Effluent ~~Release~~ Report for this period shall identify the new location. The new location shall be added to the radiological environmental monitoring program within 30 days. The sampling location, excluding the control station location, having the lowest calculated dose or dose commitments (via the same exposure pathway) may be deleted from this monitoring program after October 31 of the year in which this land use census was conducted.

C. Interlaboratory Comparison Program

1. Analyses shall be performed on radioactive materials supplied as part of an approved interlaboratory comparison program as described in the
2. The results of analyses performed as a part of the above required program shall be included in the Annual Radiation Environmental Monitoring Report. When required analyses are not performed, corrective action shall be reported in the Annual Radiation Environmental Monitoring Report.

TABLE TS.4.17-3

TABLE NOTATION (continued)

Notes:

- b. A composite sample is one in which the quantity of liquid sampled is proportional to the quantity of liquid waste discharged and in which the method of sampling employed results in a specimen which is representative of the liquids released.
- c. The principal gamma emitters for which the LLD specification will apply are exclusively the following radionuclides: Mn-54, Fe-59, Co-58, Co-60, Zn-65, Mo-99, Cs-134, Cs-137, Ce-141, and Ce-144. This list does not mean that only these nuclides are to be detected and reported. Other peaks which are measurable and identifiable, together with the above nuclides, shall also be identified and reported.
- d. Nuclides which are below the LLD for the analyses should not be reported as being present at the LLD level. When unusual circumstances result in LLDs higher than required, the reasons shall be documented in the ~~Semi-Annual~~ Radioactive Effluent ~~Release~~ Report.
- e. A continuous release is the discharge of liquid wastes of a non-discrete volume; e.g., from a volume of system that has an input flow during the continuous release.
- f. To be representative of the quantities and concentrations of radioactive materials in liquid effluents, samples shall be collected continuously in proportion to the rate of flow of the effluent stream. Prior to analyses, all samples taken for the composite shall be thoroughly mixed in order for the composite sample to be representative of the effluent release.
- g. A batch release is the discharge of liquid wastes of a discrete volume. Prior to sampling for analyses, each batch shall be isolated, and then thoroughly mixed. to assure representative sampling.
- h. Daily grab samples from the turbine building sumps shall be collected and analyzed for principal gamma emitters, including I-131, whenever primary to secondary leakage exceeds 0.5 gpm in any steam generator. This sampling is provided in lieu of continuous monitoring with automatic isolation.
- i. Grab samples shall be collected at least once per 8 hours when steam generator blowdown releases are being made and the specific activity of the secondary coolant is >0.01 uCi/gram dose equivalent I-131 or primary to secondary leakage exceeds 0.5 gpm.

TABLE TS.4.17-4

TABLE NOTATION (Continued)

- b. Grab samples taken at the ventilation exhausts are generally below minimum detectable levels for most nuclides with existing analytical equipment. If this is the case, PWR GALE Code noble gas isotopic ratios may be assumed.
- c. With >1 uCi/gm Dose Equivalent I-131 in either Unit 1 or Unit 2 reactor Coolant system, the iodine and particulate collection devices for all release points shall be removed and analyzed daily until it is shown that a pattern exists which can be used to predict the release rate. Sampling may then revert to weekly. When samples collected for one day are analyzed, the corresponding LLD's may be increased by a factor of 10. Samples shall be analyzed within 48 hours after removal.
- d. To be representative of the average quantities and concentrations of radioactive materials in particulate form in gaseous effluents, samples should be collected in proportion to the rate of flow of the effluent streams.
- e. The principal gamma emitters for which the LLD specification will apply are exclusively the following radionuclides: Kr-87, Kr-88, Xe-133, Xe-133m, Xe-135, and Xe-138 for gaseous emissions and Mn-54, Fe-59, Co-58, Co-60, Zn-65, Mo-99, Cs-134, Cs-137, Ce-141, and Ce-144 for particulate emissions. This list does not mean that only these nuclides are to be detected and reported. Other peaks which are measurable and identifiable, together with the above nuclides, shall also be identified and reported.
- f. Nuclides which are below the LLD for the analyses should not be reported as being present at the LLD level for that nuclide. When unusual circumstances result in LLD's higher than reported, the reasons shall be documented in the ~~Semi~~Annual Radioactive Effluent Release Report.
- g. The ratio of the sample flow rate to the sampled stream flow rate shall be known for the time period sampled. Design flow rates may be used for building exhaust vent flow rates.
- h. Releases are made via the reactor building vents only during purging, or operation of the shield building ventilation system, or operation of the auxiliary building special ventilation system. In lieu of weekly or monthly removal and analysis of iodine and particulate collection devices, these devices may be removed and analyzed following each release provided that the release lasts less than one week. Removal and analysis of collection devices is not required if releases are not being made.

gaseous effluents, and containment atmosphere samples under accident conditions. The program shall include the following:

- a. Training of personnel,
- b. Procedures for sampling and analysis,
- c. Provisions for maintenance of sampling and analysis equipment.

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. Process Control Program (PCP)

The PCP shall be approved by the Commission prior to initial implementation. Changes to the PCP shall satisfy the following requirements:

- 1. A description of changes shall be submitted to the Commission with the ~~Semi-Annual Radioactive Effluent Release~~ Report for the period in which the change(s) were made. This submittal shall contain:
 - a. sufficiently detailed information to totally support the rationale for the change without benefit of additional or supplemental information;
 - b. a determination that the change did not reduce the overall conformance of the solidified waste product to existing criteria for solid wastes; and
 - c. documentation of the fact that the change has been reviewed and found acceptable by the Operations Committee.
- 2. Shall become effective upon review and acceptance by the Operations Committee.

E. Offsite Dose Calculation Manual (ODCM)

The ODCM shall be approved by the Commission prior to initial implementation. Changes to the ODCM shall satisfy the following requirements:

1. Shall be submitted to the Commission with the ~~Semi~~-Annual Radioactive Effluent Report for the period in which the change(s) were made effective. This submittal shall contain:
 - a. sufficiently detailed information to totally support the rationale for the change without benefit of additional or supplemental information. Information submitted should consist of a package of those pages of the ODCM to be changed with each page numbered and provided with a revision date, together with appropriate analyses or evaluations justifying the change(s).
 - b. a determination that the change will not reduce the accuracy or reliability of dose calculations or setpoint determinations; and
 - c. documentation of the fact that the change has been reviewed and found acceptable by the Operations Committee.
2. Shall become effective upon review and acceptance by the Operations Committee.

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 which govern 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 Superintendent Security.

G. Temporary Changes to Procedures

Temporary changes to Operations Committee reviewed procedures described in A,B,C,D,E and F above, which do not change the intent of the original procedure may be made with the concurrence of two members of the unit management staff, at least one of whom holds a Senior Reactor Operator License. Such changes shall 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 two (2) individuals knowledgeable in the area affected by the procedure.

6.7.A.4. ~~Semi-Annual Radioactive Effluent Release Report~~

Routine radioactive effluent release reports covering the operation of the unit during the previous ~~six months~~ calendar year of operation shall be submitted ~~within 60 days after January 1st and July 1st~~ by May 1st of each year.

The radioactive effluent ~~release~~ reports shall include a summary of the quantities of radioactive liquid and gaseous effluents as outlined in Appendix B of Regulatory Guide 1.21, Revision 1, June, 1974, with data summarized on a quarterly basis.

The report ~~to be submitted 60 days after January 1 of each year~~ shall include an assessment of the radiation doses from radioactive effluents released from the plant during the previous calendar year. ~~This same~~ The report shall also include an assessment of the radiation doses from radioactive liquid and gaseous effluents to individuals due to their activities inside the site boundary (Figures 3.9-1 and 3.9-2) during the report period. All assumptions used in making these assessments (i.e., specific activity, exposure time and location) shall be included in ~~these~~ the reports. The assessment of radiation doses shall be performed in accordance with the OFFSITE DOSE CALCULATION MANUAL (ODCM) or standard NRC computer codes.

The report ~~to be submitted 60 days after January 1 of each year~~ shall also include an assessment of radiation doses to the likely most exposed member of the general public from reactor releases and other nearby uranium fuel cycle sources (including doses from primary effluent pathways and direct radiation) for the previous 12 consecutive months to show conformance with 40 CFR 190, Environmental Radiation Protection Standards for Nuclear Power Operation.

The radioactive effluent ~~release~~ reports shall include the following information for solid waste shipped offsite during the report period.

- a. container volume,
- b. total curie quantity (specify whether determined by measurement or estimate),
- c. principal radionuclides (specify whether determined by measurement or estimate),
- d. type of waste (e.g., spent resin, compacted dry waste, evaporator bottoms),
- e. type of container (e.g., LSA, Type A, Type B, Large Quantity), and
- f. solidification agent (e.g., cement, urea formaldehyde).

The radioactive effluent ~~release~~ reports shall include unplanned releases from the site of radioactive materials in gaseous and liquid effluents on a quarterly basis, changes to the ODCM, a description of changes to the PCP, a report of when milk or vegetable samples cannot be obtained as required by Table 4.10-1, and changes in land use resulting in significant increases in calculated doses.

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EXHIBIT C

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6.7 A.4. Annual Radioactive Effluent Report

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The report shall include an assessment of the radiation doses from radioactive effluents released from the plant during the previous calendar year. The report shall also include an assessment of the radiation doses from radioactive liquid and gaseous effluents to individuals due to their activities inside the site boundary (Figures 3.9-1 and 3.9-2) during the report period. All assumptions used in making these assessments (i.e., specific activity, exposure time and location) shall be included in the report. The assessment of radiation doses shall be performed in accordance with the OFFSITE DOSE CALCULATION MANUAL (ODCM) or standard NRC computer codes.

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