

### 3.1.4 Maximum Reactor Coolant Activity

The total specific activity in  $\mu\text{Ci}/\text{gram}$  of the reactor coolant shall not exceed  $1.0 \mu\text{Ci}/\text{gram}$  dose equivalent I-131 and  $100/\bar{E} \mu\text{Ci}/\text{gram}$  under all modes of operation. ( $\bar{E}$  is the average of beta and gamma energy (MEV) per disintegration of the specific activity.)

With the specific activity of the primary coolant  $> 1.0 \mu\text{Ci}/\text{gram}$  dose equivalent I-131 for more than 48 hours during one continuous time interval or exceeding the limit line shown on Figure 3.1.4-1, be in at least hot shutdown with  $T_{\text{avg}} < 500^\circ\text{F}$  within 6 hours.

With the specific activity of the primary coolant  $> 100/\bar{E} \mu\text{Ci}/\text{gram}$ , be in at least hot shutdown with  $T_{\text{avg}} < 500^\circ\text{F}$  within 6 hours.

In any operating mode, with the specific activity of the primary coolant  $> 1.0 \mu\text{Ci}/\text{gram}$  dose equivalent I-131 or  $> 100/\bar{E} \mu\text{Ci}/\text{gram}$ , perform the sampling and analysis requirements of Item 1 of Table 4.1-2 until the specific activity of the primary coolant is restored to within its limits.

The specific activity of the primary coolant shall be determined to be within the limits by performance of the sampling and analysis program of Table 4.1-2.

### Basis

The limitations on the specific activity of the primary coolant ensure that the resulting 2 hour doses at the site boundary will not exceed an appropriately small fraction of Part 100 limits following a steam generator tube rupture accident in conjunction with an assumed steady state primary-to-secondary steam generator leakage rate of 1.0 GPM.

The statement permitting POWER OPERATION to continue for limited time periods with the primary coolant's specific activity  $> 1.0 \mu\text{Ci/gram DOSE EQUIVALENT I-131}$ , but within the allowable limit shown on Figure 3.1.4-1, accommodates possible iodine spiking phenomenon which may occur following changes in THERMAL POWER.

Reducing  $T_{\text{avg}}$  to  $< 500^\circ\text{F}$  prevents the release of activity should a steam generator tube rupture since the saturation pressure of the primary coolant is below the lift pressure of the atmospheric steam relief valves. The surveillance requirements provide adequate assurance that excessive specific activity levels in the primary coolant will be detected in sufficient time to take corrective action. Information obtained on iodine spiking will be used to assess the parameters associated with spiking phenomena. A reduction in frequency of isotopic analyses following power changes may be permissible if justified by the data obtained.

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Startup reports shall be submitted within (1) 90 days following completion of the startup test program, (2) 90 days following resumption of commercial power operation, or (3) 9 months following initial criticality, whichever is earliest. If the startup report does not cover all three events (i.e., initial criticality, completion of startup test program, and resumption of commercial power operation), supplementary reports shall be submitted at least every three months until all three events have been completed.

b. Annual Reports

Annual Reports covering the activities of the unit as described below for the previous calendar year shall be submitted prior to March 1 of each year. The initial report shall be submitted prior to March 1 of the year following initial criticality.

Reports required on an annual basis shall include:

1. A tabulation on an annual basis of the number of station, utility, and other personnel (including contractors) receiving exposures greater than 100 mrem/yr and their associated man-rem exposure according to work and job functions\* (e.g., reactor operations and surveillance, inservice inspection, routine maintenance, special maintenance [describe maintenance], waste processing, and refueling). The dose assignments to various duty functions may be estimated based on pocket dosimeter, thermoluminescent dosimeter (TLD), or film badge measurements. Small exposures totaling less than 20% of the individual total dose need not be accounted for. In the aggregate, at least 80% of the total whole-body dose received from external sources should be assigned to specific major work functions.

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\* This tabulation supplements the requirements of §20.407 of 10 CFR Part 20.

2. The results of specific analyses in which the primary coolant exceeded the limits of Specification 3.1.4. The following information shall be included: (a) reactor power history starting 48 hours prior to the first sample in which the limit was exceeded (in graphic and tabular format); (b) results of the last isotopic analysis for radioiodine performed prior to exceeding the limit, results of analysis while limit was exceeded and results of one analysis after the radioiodine activity was reduced to less than limit. Each result should include date and time of sampling and the radioiodine concentrations; (c) clean-up flow history starting 48 hours prior to the first sample in which the limit was exceeded; (d) graph of the I-131 concentration ( $\mu\text{Ci/gm}$ ) and one other radioiodine isotope concentration ( $\mu\text{Ci/gm}$ ) as a function of time for the duration of the specific activity above the steady-state level; and (e) the time duration when the specific activity of the primary coolant exceeded the radioiodine limit.

3. Primary safety and relief valve challenges.

6.9.2 Deleted

6.9.3 Special Reports

6.9.3.1 Special reports shall be submitted to the Regional Administrator of the NRC Regional Office within the time period specified for each report. These reports shall be submitted covering the activities identified below pursuant to the requirements of the applicable reference specification:

<u>Area</u>	<u>Reference</u>	<u>Submittal Date</u>
a. Containment Leak Rate Testing	4.4	Upon completion of each test
b. Containment Sample Tendon Surveillance	4.4	Upon completion of the inspection at 25 years of operation
c. Post-Operational Containment Structural Test	4.4	Upon completion of the test at 20 years of operation
d. Fire Protection System	3.14	As specified by limiting condition for operation
e. Overpressure Protection System Operation	3.1.2.1.e	Within 30 days of operation
f. Auxiliary Feedwater Pumps	3.4	Within 30 days after becoming inoperable