Marked-Up Pages from Facility Operating
License No. NPF-62 and the Technical Specifications

(8) Post-Fuel Loading Initial Test Program (Section 14, SER, SSER 5 and SSER 6)

Any changes to the initial test program described in Section 14 of the FSAR made in accordance with the provisions of 10 CFR 50.59 shall be reported in accordance with 50.59(b) within one month of such change.

(9) Emergency Response Capabilities (Generic Letter 82-33, Supplement 1 to NUREG-0737, Section 7.5.3.1, SSER 5 and SSER 8, and Section 18, SER, SSER 5 and Safety Evaluation Dated April 17, 1987)

a. IP in accordance with the commitment contained in a letter dated December 11, 1986, shall install and have operational separate power sources for each of the fuel zone level channels as provided for in Regulatory Guide 1.97 prior to startup following the first refueling outage.

b. IP shall submit a detailed control room design final supplemental summary report within 90 days of issuance of the full power license that completes all the remaining items identified in Section 18.3 of the Safety Evaluation dated April 17, 1987.

D. The facility requires exemptions from certain requirements of 10 CFR Part 50 and 10 CFR Part 70. These include: (a) an exemption from the requirements of 10 CFR 70.24 for the criticality alarm monitors around the fuel storage area; ~~(b) an exemption from the requirement of paragraph III.D.2(b)(ii) of Appendix J, substituting the seal leakage test at Pa of paragraph III.D.2(b)(iii) for the entire airlock test at Pa of paragraph III.D.2(b)(ii) of Appendix J when no maintenance has been performed in the airlock that could affect its sealing capability (Section 6.2.6 of SSER 6); (c)~~ (b) an exemption from the requirement of 10 CFR Part 50, Appendix J - Option B, paragraph III.B, ~~paragraph III.C.3 of Appendix J,~~ exempting the measured leakage rates from the main steam isolation valves from inclusion in the combined leak rate for the local leak rate tests (Section 6.2.6 of SSER 6); ~~(d)~~ (c) an exemption from the requirements of paragraph III.B.3 of Appendix J, and Option B of 10 CFR Part 50, exempting leakage from the valve packing and the body-to-bonnet seal of valve 1E51-F374 associated with containment penetration 1MC-44 from inclusion in the combined leakage rate for penetrations and valves subject to Type B and C tests; ~~and (e) an exemption from the requirement of paragraph III.D.1.(a) to conduct the third Type A test of each 10-year service period when the plant is shut down for the 10-year plant inservice inspections.~~ The special circumstances regarding each exemption, except for Items (a) ~~and (d)~~ above, are identified in the referenced section of the safety evaluation report and the supplements thereto.

(SER supporting Amendment 62 to Facility Operating License No. NPF-62)

An exemption was previously granted pursuant to 10 CFR 70.24. The exemption was granted with NRC materials license No. SNM-1886, issued November 27, 1985, and relieved IP from the requirement of having a criticality alarm system. IP is hereby exempted from the criticality alarm system provision of 10 CFR 70.24 so far as this section applies to the storage of fuel assemblies held under this license.

~~The special circumstances regarding the exemption identified in Item (d) above are identified in the safety evaluation accompanying Amendment No. 62 to this license. The special circumstances regarding the exemption identified in Item (e) above are identified in the safety evaluation accompanying Amendment No. 83 to this license.~~

These exemptions are authorized by law, will not present an undue risk to the public health and safety, and are consistent with the common defense and security. The exemptions in items (b) ~~through (e)~~ and (c) above are granted pursuant to 10 CFR 50.12. With these exemptions, the facility will operate, to the extent authorized herein, in conformity with the application, as amended, the provisions of the Act, and the rules and regulations of the Commission.

E. The licensees shall fully implement and maintain in effect all provisions of the Commission-approved physical security plan, guard training and qualification, and safeguards contingency plans including amendments made pursuant to provisions of the Miscellaneous Amendments and Search Requirements revisions to 10 CFR 73.55 (51 FR 27817 and 27822) and to the authority of 10 CFR 50.90 and 10 CFR 50.54(p). The plans, which contain Safeguards Information protected under 10 CFR 73.21, are entitled: "Clinton Power Station Physical Security Plan," with revisions submitted through May 27, 1993; "Clinton Power Station Training and Qualification Plan," with revisions submitted through May 27, 1993; and "Clinton Power Station Safeguards Contingency Plan," with revisions submitted through May 27, 1993. Changes made in accordance with 10 CFR 73.55 shall be implemented in accordance with the schedule set forth therein.

F. IP shall implement and maintain in effect all provisions of the approved fire protection program as described in the Final Safety Analysis Report as amended, for the Clinton Power Station, Unit No. 1, and as approved in the Safety Evaluation Report (NUREG-0853) dated February 1982 and Supplement Nos. 1 thru 8 thereto subject to the following provision:

> IP may make changes to the approved fire protection program without prior approval of the Commission only if those changes would not adversely affect the ability to achieve and maintain safe shutdown in the event of a fire.

G. Except as otherwise provided in the Technical Specifications or Environmental Protection Plan, IP shall report any violations of the requirements contained in Section 2.C of this license in the following manner: initial notification shall be made within 24 hours to the NRC Operations Center via the Emergency Notification System with written followup within thirty days in accordance with the procedures described in 10 CFR 50.73(b), (c), and (e).

1.1 Definitions (continued)

EMERGENCY CORE COOLING SYSTEM (ECCS) RESPONSE TIME	The ECCS RESPONSE TIME shall be that time interval from when the monitored parameter exceeds its ECCS initiation setpoint at the channel sensor until the ECCS equipment is capable of performing its safety function (i.e., the valves travel to their required positions, pump discharge pressures reach their required values, etc.). Times shall include diesel generator starting and sequence loading delays, where applicable. The response time may be measured by means of any series of sequential, overlapping, or total steps so that the entire response time is measured.
END OF CYCLE RECIRCULATION PUMP TRIP (EOC-RPT) SYSTEM RESPONSE TIME	The EOC-RPT SYSTEM RESPONSE TIME shall be that time interval from initial movement of the associated turbine stop valve or turbine control valve to complete suppression of the electric arc between the fully open contacts of the recirculation pump circuit breaker. The response time may be measured by means of any series of sequential, overlapping, or total steps so that the entire response time is measured.
ISOLATION SYSTEM RESPONSE TIME	The ISOLATION SYSTEM RESPONSE TIME shall be that time interval from when the monitored parameter exceeds its isolation initiation setpoint at the channel sensor until the isolation valves travel to their required positions. The response time may be measured by means of any series of sequential, overlapping, or total steps so that the entire response time is measured.
~~L_a~~	~~The maximum allowable primary containment leakage rate, L_a, shall be 0.65% of primary containment air weight per day at the calculated peak containment pressure (P_a).~~

(continued)

SURVEILLANCE REQUIREMENTS

SURVEILLANCE		FREQUENCY
SR 3.6.1.1.1	----------NOTE---------- The results of SR 3.6.1.1.2 shall be included when evaluating compliance with this limit. ---------- Perform required visual examinations and leakage rate testing, except for primary containment air lock testing, in accordance with ~~10 CFR 50, Appendix J, as modified by approved exemptions.~~ the Primary Containment Leakage Rate Testing Program. ~~The leakage rate acceptance criterion is $\leq 1.0\ L_a$. However, during the first unit startup following testing performed in accordance with 10 CFR 50, Appendix J, as modified by approved exemptions, the leakage rate acceptance criteria are $< 0.6\ L_a$ for the Type B and Type C tests, and $< 0.75\ L_a$ for the Type A test.~~	~~-----NOTE----- SR 3.0.2 is not applicable ----------~~ In accordance with ~~10 CFR 50, Appendix J, as modified by approved exemptions~~ the Primary Containment Leakage Rate Testing Program.
SR 3.6.1.1.2	Perform leakage rate testing of Primary Containment Hydrogen Recombiner System outside its containment isolation valves at P_a.	~~-----NOTE----- SR 3.0.2 is not applicable ----------~~ In accordance with ~~10 CFR 50, Appendix J, as modified by approved exemptions~~ the Primary Containment Leakage Rate Testing Program

SURVEILLANCE REQUIREMENTS

SURVEILLANCE	FREQUENCY
SR 3.6.1.2.1 ----------NOTES---------- 1. Only required to be met during MODES 1, 2, and 3. 2. An inoperable air lock door does not invalidate the previous successful performance of the overall air lock leakage test. 3. Results shall be evaluated against acceptance criteria ~~of SR 3.6.1.1.1 in accordance with 10 CFR 50, Appendix J, as modified by approved exemptions.~~ applicable to the Primary Containment Leakage Rate Testing Program. ----------	~~NOTE SR 3.0.2 is not applicable~~
Perform required primary containment air lock leakage rate testing in accordance with ~~10 CFR 50, Appendix J, as modified by approved exemptions.~~ the Primary Containment Leakage Rate Testing Program. ~~The acceptance criteria for air lock testing are:~~ ~~a. Overall air lock leakage rate is $\leq$ 5 scfh when tested at $\geq P_a$.~~ ~~b. For each door, leakage rate is $\leq$ 5 scfh when the gap between the door seals is pressurized to $\geq P_a$.~~	In accordance with ~~10 CFR 50, Appendix J, as modified by approved exemptions~~ the Primary Containment Leakage Rate Testing Program.
SR 3.6.1.2.2 ----------NOTE---------- Only required to be performed upon entry or exit through the primary containment air lock. ---------- Verify only one door in the primary containment air lock can be opened at a time.	184 days

SURVEILLANCE REQUIREMENTS (continued)

SURVEILLANCE		FREQUENCY
SR 3.6.1.3.4	Verify the isolation time of each power operated and each automatic PCIV, except MSIVs, is within limits.	In accordance with the Inservice Testing Program
SR 3.6.1.3.5	----------NOTE---------- Only required to be met in MODES 1, 2, and 3. ----------	
	Perform leakage rate testing for each primary containment purge valve with resilient seals.	Once within 92 days after opening the valve AND ~~NOTE SR 3.0.2 is not applicable~~ In accordance with ~~10 CFR 50, Appendix J, as modified by approved exemptions~~ the Primary Containment Leakage Rate Testing Program
SR 3.6.1.3.6	Verify the isolation time of each MSIV is ≥ 3 seconds and ≤ 5 seconds.	In accordance with the Inservice Testing Program
SR 3.6.1.3.7	Verify each automatic PCIV actuates to the isolation position on an actual or simulated isolation signal.	18 months

(continued)

SURVEILLANCE REQUIREMENTS (continued)

SURVEILLANCE		FREQUENCY
SR 3.6.1.3.8	----------NOTE---------- Only required to be met in MODES 1, 2, and 3. ---------- Verify the combined leakage rate for all secondary containment bypass leakage paths is $\leq 0.08\ L_a$ when pressurized to $\geq P_a$. the Primary Containment Leakage Rate Testing Program	~~----NOTE---- SR 3.0.2 is not applicable ----------~~ In accordance with ~~10 CFR 50, Appendix J, as modified by approved exemptions~~
SR 3.6.1.3.9	----------NOTE---------- Only required to be met in MODES 1, 2, and 3. ---------- Verify leakage rate through each main steam line is ≤ 28 scfh when tested at $\geq P_a$. the Primary Containment Leakage Rate Testing Program	~~----NOTE---- SR 3.0.2 is not applicable ----------~~ In accordance with ~~10 CFR 50, Appendix J, as modified by approved exemptions~~
SR 3.6.1.3.10	----------NOTE---------- Only required to be met in MODES 1, 2, and 3. ---------- Verify combined leakage rate ~~of 1 gpm times the total number of PCIVs~~ through hydrostatically tested lines that penetrate the primary containment is ~~not exceeded when these isolation valves are tested at $\geq 1.1\ P_a$.~~ within limits. the Primary Containment Leakage Rate Testing Program	~~----NOTE---- SR 3.0.2 is not applicable ----------~~ In accordance with ~~10 CFR 50, Appendix J, as modified by approved exemptions~~

(continued)

5.5 Programs and Manuals (continued)

5.5.11 Technical Specifications (TS) Bases Control Program

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

a. Changes to the Bases of the TS shall be made under appropriate administrative controls and reviews.

b. Licensees may make changes to Bases without prior NRC approval provided the changes do not involve either of the following:

1. A change in the TS incorporated in the license; or

2. A change to the USAR or Bases that involves an unreviewed safety question as defined in 10 CFR 50.59.

c. The Bases Control Program shall contain provisions to ensure that the Bases are maintained consistent with the USAR.

d. Proposed changes that meet the criteria of either Specification 5.5.11.b.1 or Specification 5.5.11.b.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).

5.5.12 Ultimate Heat Sink (UHS) Erosion, Sediment Monitoring, and Dredging Program

A program to provide maintenance on the UHS in the event inspections of the UHS dam, its abutments, or the UHS shoreline indicate erosion or local instability. This program shall ensure that the UHS is maintained in such a way as to achieve the following objectives:

a. During normal operation, there will be a volume of water in the UHS below elevation 675 sufficient to receive the sediment load from a once-in-25-year flood event; and

b. Still be adequate to maintain the plant in a safe-shutdown condition for 30 days under meteorological conditions of the severity suggested by Regulatory Guide 1.27.

INSERT

(continued)

change to single line

5.5 Programs and Manuals (continued)

5.5.13 Primary Containment Leakage Rate Testing Program

A program shall be established to implement the leakage rate testing of the primary containment as required by 10 CFR 50.54(o) and 10 CFR 50, Appendix J, Option B, as modified by approved exemptions. This program shall be in accordance with the guidelines contained in Regulatory Guide 1.163, "Performance-Based Containment Leak-Test Program", dated September 1995, except that Bechtel Topical Report BN-TOP-1 is also an acceptable option for performance of Type A tests.

The peak calculated containment internal pressure for the design basis loss of coolant accident, P_a, is 9.0 psig.

The maximum allowable primary containment leakage rate, L_a, at P_a, shall be 0.65% of primary containment air weight per day.

Leakage Rate acceptance criteria are:

a. Primary containment leakage rate acceptance criterion is $\leq 1.0\ L_a$. During the first unit startup following testing in accordance with this program, the leakage rate acceptance criteria are $\leq 0.60\ L_a$ for the Type B and Type C tests and $\leq 0.75\ L_a$ for Type A tests;

b. Air lock testing acceptance criteria are:

   1) Overall air lock leakage rate is ≤ 5 scfh when tested at $\geq P_a$,

   2) For each door, leakage rate is ≤ 5 scfh when the gap between the door seals is pressurized to $\geq P_a$.

The provisions of SR 3.0.2 do not apply to the test frequencies specified in the Primary Containment Leakage Rate Testing Program.

The provisions of SR 3.0.3 are applicable to the Primary Containment Leakage Rate Testing Program.

Technical Specification Bases Changes

BASES

SR 3.0.2 (continued)

The 25% extension does not significantly degrade the reliability that results from performing the Surveillance at its specified Frequency. This is based on the recognition that the most probable result of any particular Surveillance being performed is the verification of conformance with the SRs. The exceptions to SR 3.0.2 are those Surveillances for which the 25% extension of the interval specified in the Frequency does not apply. These exceptions are stated in the individual Specifications. ~~An example of where SR 3.0.2 does not apply is a Surveillance with a Frequency of "in accordance with 10 CFR 50, Appendix J, as modified by approved exemptions."~~ The requirements of regulations take precedence over the TS. ~~The TS cannot in and of themselves extend a test interval specified in the regulations. Therefore, there is a Note in the Frequency stating, "SR 3.0.2 is not applicable."~~

Therefore, when a test interval is specified in the regulations, the test interval cannot be extended by the TS, and the TS will then include a NOTE stating, "SR 3.0.2 is not applicable." An example of an exception when the test interval is not specified in the regulations is the Note in the Primary Containment Leakage Rate Testing Program, "SR 3.0.2 is not applicable." This exception is provided because the program already includes extension of test intervals.

As stated in SR 3.0.2, the 25% extension also does not apply to the initial portion of a periodic Completion Time that requires performance on a "once per..." basis. The 25% extension applies to each performance after the initial performance. The initial performance of the Required Action, whether it is a particular Surveillance or some other remedial action, is considered a single action with a single Completion Time. One reason for not allowing the 25% extension to this Completion Time is that such an action usually verifies that no loss of function has occurred by checking the status of redundant or diverse components or accomplishes the function of the inoperable equipment in an alternative manner.

The provisions of SR 3.0.2 are not intended to be used repeatedly merely as an operational convenience to extend Surveillance intervals (other than those consistent with refueling intervals) or periodic Completion Time intervals beyond those specified.

SR 3.0.3

SR 3.0.3 establishes the flexibility to defer declaring affected equipment inoperable or an affected variable outside the specified limits when a Surveillance has not been completed within the specified Frequency. A delay period of up to 24 hours or up to the limit of the specified Frequency, whichever is less, applies from the point in time that it is discovered that the Surveillance has not been performed in accordance with SR 3.0.2, and not at the time

(continued)

BASES

BACKGROUND (continued)

e. The leakage control system associated with the main steam lines is OPERABLE, except as provided in LCO 3.6.1.8. "Main Steam Isolation Valve (MSIV) Leakage Control System (LCS)"; and

f. The primary containment leakage rates are within the limits of this LCO.

, Option B

This Specification ensures that the performance of the primary containment, in the event of a DBA, meets the assumptions used in the safety analyses of References 1 and 2. SR 3.6.1.1.1 leakage rate requirements are in conformance with 10 CFR 50, Appendix J (Ref. 3), as modified by approved exemptions.

APPLICABLE SAFETY ANALYSES

The safety design basis for the primary containment is that it must withstand the pressures and temperatures of the limiting DBA without exceeding the design leakage rate.

The DBA that postulates the maximum release of radioactive material within primary containment is a LOCA. In the analysis of this accident, it is assumed that primary containment is OPERABLE such that release of fission products to the environment is controlled by the rate of primary containment leakage.

Analytical methods and assumptions involving the primary containment are presented in References 1 and 2. The safety analyses assume a nonmechanistic fission product release following a DBA, which forms the basis for determination of offsite doses. The fission product release is, in turn, based on an assumed leakage rate from the primary containment. OPERABILITY of the primary containment ensures that the leakage rate assumed in the safety analyses is not exceeded.

design basis LOCA

The maximum allowable leakage rate for the primary containment (L_a) is 0.65% by weight of the containment and drywell air per 24 hours at the maximum peak containment pressure (P_a) of 9.0 psig (Ref. 4).

Primary containment satisfies Criterion 3 of the NRC Policy Statement.

(continued)

BASES (continued)

LCO

Primary Containment Leakage Rate Testing Program

Primary containment OPERABILITY is maintained by limiting leakage to $\leq 1.0\ L_a$, except prior to the first startup after performing a required ~~10 CFR 50, Appendix J,~~ leakage test. At this time, ~~the combined Type B and C~~ leakage must be met ~~$< 0.6\ L_a$, and the overall Type A leakage must be $< 0.75\ L_a$~~. Compliance with this LCO will ensure a primary containment configuration, including equipment hatches, that is structurally sound and that will limit leakage to those leakage rates assumed in the safety analysis. Individual leakage rates specified for the primary containment air locks are addressed in LCO 3.6.1.2.

applicable

limits

APPLICABILITY

In MODES 1, 2, and 3, a DBA could cause a release of radioactive material to primary containment. In other operational conditions, events which could cause a release of radioactive material to primary containment are mitigated by secondary containment. In MODES 4 and 5, the probability and consequences of these events are reduced due to the pressure and temperature limitations of these MODES. Therefore, primary containment is not required to be OPERABLE in MODES 4 and 5 to prevent leakage of radioactive material from primary containment.

ACTIONS

A.1

In the event that primary containment is inoperable, primary containment must be restored to OPERABLE status within 1 hour. The 1 hour Completion Time provides a period of time to correct the problem that is commensurate with the importance of maintaining primary containment OPERABILITY during MODES 1, 2, and 3. This time period also ensures that the probability of an accident (requiring primary containment OPERABILITY) occurring during periods where primary containment is inoperable is minimal.

ACTIONS

B.1 and B.2

If primary containment cannot be restored to OPERABLE status within the associated Completion Time, the plant must be brought to a MODE in which the LCO does not apply. To achieve this status, the plant must be brought to at least

(continued)

BASES

ACTIONS

B.1 and B.2 (continued)

MODE 3 within 12 hours and to MODE 4 within 36 hours. The allowed Completion Times are reasonable, based on operating experience, to reach the required plant conditions from full power conditions in an orderly manner and without challenging plant systems.

SURVEILLANCE REQUIREMENTS

SR 3.6.1.1.1

Maintaining the primary containment OPERABLE requires compliance with the visual examinations and leakage rate test requirements of ~~10 CFR 50, Appendix J (Ref. 3), as modified by approved exemptions,~~ the Primary Containment Leakage Rate Testing Program. Failure to meet air lock leakage testing (SR 3.6.1.2.1), secondary containment bypass leakage (SR 3.6.1.3.8), resilient seal primary containment purge valve leakage testing (SR 3.6.1.3.5), main steam isolation valve leakage (SR 3.6.1.3.9), or hydrostatically tested valve leakage (SR 3.6.1.3.10) does not necessarily result in a failure of this SR. The impact of the failure to meet these SRs must be evaluated against the Type A, B, and C acceptance criteria of ~~10 CFR 50, Appendix J (Ref. 3), as modified by approved exemptions.~~ the Primary Containment Leakage Rate Testing Program. As left leakage prior to the first startup after performing a required ~~10 CFR 50, Appendix J,~~ leakage test is required to be $\leq 0.6\ L_a$ for combined Type B and C leakage, and $\leq 0.75\ L_a$ for overall Type A leakage. At all other times between required leakage rate tests, the acceptance criteria is based on an overall Type A leakage limit of $\leq 1.0\ L_a$. At $\leq 1.0\ L_a$ the offsite dose consequences are bounded by the assumptions of the safety analysis. The Frequency is required by ~~10 CFR 50, Appendix J, as modified by approved exemptions. Thus, SR 3.0.2 (which allows Frequency extensions) does not apply.~~ the Primary Containment Leakage Rate Testing Program.

This Surveillance is modified by a Note that requires the leakage rate results of SR 3.6.1.1.2 for the Primary Containment Hydrogen Recombiner System (each loop) to be included in determining compliance with required limits. This can be accomplished either by having the loops in service during the ILRT, or if the loop is not in service during the ILRT, by separately measuring the leakage and including it in the measured ILRT results.

(continued)

BASES

SURVEILLANCE REQUIREMENTS (continued)

SR 3.6.1.1.2

With respect to primary containment integrated leakage rate testing, the primary containment hydrogen recombiners (located outside the primary containment) are considered extensions of the primary containment boundary. This requires the smaller of the leakage from the PCIVs that isolate the primary containment hydrogen recombiner, or from the piping boundary outside containment, to be included in the ILRT results. The Frequency is required by the Primary Containment Leakage Rate Testing Program ~~10 CFR 50, Appendix J, as modified by approved exemptions. Thus, SR 3.0.2 (which allows Frequency extensions) does not apply.~~

REFERENCES

1. USAP, Section 6.2.
2. USAR, Section 15.6.5.
3. 10 CFR 50, Appendix J, Option B.
4. USAR, Section 6.2.1.
5. NEI 94-01, Revision 0, "Industry Guideline for Implementing Performance-Based Option of 10 CFR Part 50, Appendix J."
6. ANSI/ANS-56.8-1994, "American National Standard for Containment System Leakage Testing Requirement."

BASES

ACTIONS

E.1, E.2, and E.3 (continued)

positio Also, if applicable, action must be immediately initiz d to suspend OPDRVs to minimize the probability of a vessel draindown and subsequent potential for fission product release. Action must continue until OPDRVs are suspended.

The Required Actions of Condition E are modified by a Note indicating that LCO 3.0.3 does not apply. If moving irradiated fuel assemblies while in MODE 1, 2, or 3, the fuel movement is independent of reactor operations. Therefore, inability to suspend movement of irradiated fuel assemblies is not sufficient reason to require a reactor shutdown.

SURVEILLANCE REQUIREMENTS

SR 3.6.1.2.1 the Primary Containment Leakage Rate Testing Program

Maintaining primary containment air locks OPERABLE requires compliance with the leakage rate test requirements of ~~10 CFR 50, Appendix J (Ref. 2), as modified by approved exemptions~~ when in MODES 1, 2, and 3. This SR reflects the leakage rate testing requirements with regard to air lock leakage (Type B leakage tests). The acceptance criteria were established during initial air lock and primary containment OPERABILITY testing. The periodic testing requirements verify that the air lock leakage does not exceed the allowed fraction of the overall primary containment leakage rate. The Frequency is required by ~~10 CFR 50, Appendix J, as modified by approved exemptions. Thus, SR 3.0.2 (which allows Frequency extensions) does not apply.~~

the Primary Containment Leakage Rate Testing Program.

The SR has been modified by three Notes. Note 1 provides an exception to the specific leakage requirements for the primary containment air locks in other than MODES 1, 2, and 3. When not operating in MODES 1, 2, or 3, primary containment pressure is not expected to significantly increase above normal, and therefore specific testing at elevated pressure is not required. Note 2 states that an inoperable air lock door does not invalidate the previous successful performance of the overall air lock leakage test. This is considered reasonable since either air lock door is

(continued)

BASES

SURVEILLANCE REQUIREMENTS

SR 3.6.1.2.1 (continued)

capable of providing a fission product barrier in the event of a DBA. Note 3 has been added to this SR, requiring the results to be evaluated against the acceptance criteria, i.e., the acceptance criteria specified in the Primary Containment Leakage Rate Testing Program, of SR 3.6.1.1.1 applicable to ~~is to be~~ included ~~properly accounted for~~ in determining the overall primary containment leakage rate. Conformance to the Primary Containment Leakage Rate Testing Program requires

SR 3.6.1.2.2

The air lock interlock mechanism is designed to prevent simultaneous opening of both doors in the air lock. Since both the inner and outer doors of an air lock are designed to withstand the maximum expected post accident primary containment pressure (Ref. 4), closure of either door will support primary containment OPERABILITY. Thus, the interlock feature supports primary containment OPERABILITY while the air lock is being used for personnel transit in and out of the containment. Periodic testing of this interlock demonstrates that the interlock will function as designed and that simultaneous inner and outer door opening will not inadvertently occur. Due to the nature of this interlock, and given that the interlock mechanism is only challenged when the primary containment air lock door is opened, this test is only required to be performed upon entering or exiting a primary containment air lock, but is not required more frequently than once per 184 days. The 184 day Frequency is based on engineering judgment and is considered adequate in view of other administrative controls.

REFERENCES

1. USAR, Section 3.8.
2. 10 CFR 50, Appendix J, Option B
3. USAR, Section 6.2.1.
4. USAR, Section 15.7.4.

BASES

ACTIONS

D.1, D.2, and D.3 (continued)

closed (refer to the requirements of SR 3.6.1.3.1; if this requirement is not met, entry into Condition A and B, as appropriate, would also be required), so that a gross breach of primary containment does not exist.

In accordance with Required Action D.2, this penetration flow path must be verified to be isolated on a periodic basis. The periodic verification is necessary to ensure that primary containment penetrations required to be isolated following an accident, which are no longer capable of being automatically isolated, will be isolated should an event occur. This Required Action does not require any testing or valve manipulation. Rather, it involves verification that those isolation devices outside primary containment and potentially capable of being mispositioned are in the correct position. For the isolation devices inside primary containment, the time period specified as "prior to entering MODE 2 or 3, from MODE 4 if not performed within the previous 92 days" is based on engineering judgment and is considered reasonable in view of administrative controls that will ensure that isolation device misalignment is an unlikely possibility.

For a primary containment purge valve with a resilient seal that is isolated in accordance with Required Action D.1, SR 3.6.1.3.5 must be performed at least once every 92 days. This provides assurance that degradation of the resilient seal is detected and confirms that the leakage rate of the primary containment purge valve does not increase during the time the penetration is isolated. The normal Frequency for SR 3.6.1.3.5 is as required by ~~10 CFR 50, Appendix J (Ref. 6), as modified by approved exemptions.~~ the Primary Containment Leakage Rate Testing Program. Since more reliance is placed on a single valve while in this Condition, it is prudent to perform the SR more often. Therefore, a Frequency of once per 92 days was chosen and has been shown acceptable based on operating experience.

E.1 and E.2

If any Required Action and associated Completion Time cannot be met in MODE 1, 2, or 3, the plant must be brought to a MODE in which the LCO does not apply. To achieve this status, the plant must be brought to at least MODE 3 within 12 hours and to MODE 4 within 36 hours. The allowed

(continued)

BASES

SURVEILLANCE REQUIREMENTS

SR 3.6.1.3.4 (continued)

in a time period less than or equal to that assumed in the safety analysis. The isolation time and Frequency of this SR are in accordance with the Inservice Testing Program.

SR 3.6.1.3.5

For primary containment purge valves with resilient seals, additional leakage rate testing beyond the test requirements of ~~10 CFR 50, Appendix J (Ref. 6),~~ is required to ensure OPERABILITY. The acceptance criterion for this test is $\leq 0.01\ L_a$ when pressurized to Pa, 9.0 psig. Since cycling these valves may introduce additional seal degradation (beyond that which occurs to a valve that has not been opened), this SR must be performed within 92 days after opening the valve. However, operating experience has demonstrated that if a valve with a resilient seal is not stroked during an operating cycle, significant increased leakage through the valve is not observed. Based on this observation, a normal Frequency in accordance with ~~10CFR50, Appendix J (Ref. 6), as modified by approved exemptions~~, was established. ~~In accordance with 10CFR50, Appendix J, SR 3.0.2 (which allows Frequency extensions) does not apply.~~

the Primary Containment Leakage Rate Testing Program

the Primary Containment Leakage Rate Testing Program

The SR is modified by a Note stating that the primary containment purge valves are only required to meet leakage rate testing requirements in MODES 1, 2, and 3. If a LOCA inside primary containment occurs in these MODES, purge valve leakage must be minimized to ensure offsite radiological release is within limits. At other times when the purge valves are required to be capable of closing (e.g., during handling of irradiated fuel), pressurization concerns are not present and the purge valves are not required to meet any specific leakage criteria.

SR 3.6.1.3.6

Verifying that the full closure isolation time of each MSIV is within the specified limits is required to demonstrate OPERABILITY. The full closure isolation time test ensures that the MSIV will isolate in a time period that does not exceed the times assumed in the DBA analyses. The Frequency of this SR is in accordance with the Inservice Testing Program.

(continued)

BASES

SURVEILLANCE REQUIREMENTS (continued)

SR 3.6.1.3.7

Automatic PCIVs close on a primary containment isolation signal to prevent leakage of radioactive material from primary containment following a DBA. This SR ensures that each automatic PCIV will actuate to its isolation position on a primary containment isolation signal. The LOGIC SYSTEM FUNCTIONAL TEST in SR 3.3.6.1.7 overlaps this SR to provide complete testing of the safety function. The 18 month Frequency is based on the need to perform this Surveillance under the conditions that apply during a plant outage and the potential for an unplanned transient if the Surveillance were performed with the reactor at power. Operating experience has shown that these components usually pass this Surveillance when performed at the 18 month Frequency. Therefore, the Frequency was concluded to be acceptable from a reliability standpoint.

SR 3.6.1.3.8

This SR ensures that the leakage rate of secondary containment bypass leakage paths is less than the specified leakage rate. This provides assurance that the assumptions in the radiological evaluations of References 1, 2, and 3 are met. The leakage rate of each bypass leakage path is assumed to be the maximum pathway leakage (leakage through the worse of the two isolation valves) unless the penetration is isolated by use of one closed and de-activated automatic valve, closed manual valve, or blind flange. In this case, the leakage rate of the isolated bypass leakage path is assumed to be the actual pathway leakage through the isolation device. If both isolation valves in the penetration are closed, the actual leakage rate is the lesser leakage rate of the two valves. This method of quantifying maximum pathway leakage is only to be used for this SR ~~(i.e., Appendix J maximum pathway leakage limits are to be quantified in accordance with Appendix J).~~

the Primary Containment Leakage Rate Testing Program.

The Frequency is consistent with ~~10 CFR 50, Appendix J (Ref 6), as modified by approved exemptions; thus, SR 3.0.2 (which allows Frequency extensions) does not apply.~~ This SR simply imposes additional acceptance criteria. Secondary containment bypass leakage is considered part of L_a.

A Note is added to this SR which states that these valves are only required to meet this leakage limit in MODES 1, 2 and 3. In the other conditions, the Reactor Coolant System

(continued)

BASES

SURVEILLANCE REQUIREMENTS

SR 3.6.1.3.8 (continued)

is not pressurized and specific primary containment leakage limits are not required.

SR 3.6.1.3.9

The analyses in References 1, 2, and 3 are based on leakage that is less than the specified leakage rate. Leakage through each main steamline must be ≤ 28 scfh when tested at P_a (9.0 psig). The MSIV leakage rate must be verified to be in accordance with the assumptions of References 1, 2, and 3. A Note is added to this SR which states that these valves are only required to meet this leakage limit in MODES 1, 2, and 3. In the other conditions, the Reactor Coolant System is not pressurized and primary containment leakage limits are not required. The Frequency is required by ~~10 CFR 50, Appendix J (Ref. 6), as modified by approved exemptions; thus, SR 3.0.2 (which allows Frequency extensions) does not apply.~~ the Primary Containment Leakage Rate Testing Program.

SR 3.6.1.3.10 (of 1 gpm times the total number of PCIVs when tested at ≥ 1.1 P_a)

Surveillance of hydrostatically tested lines provides assurance that the calculation assumptions of Reference 4 are met. The combined leakage rates must be demonstrated at the frequency of the leakage test requirements of ~~Reference 6, as modified by approved exemptions; thus, SR 3.0.2 (which allows Frequency extensions) does not apply.~~ the Primary Containment Leakage Rate Testing Program.

This SR is modified by a Note that states that these valves are only required to meet the combined leakage rate in MODES 1, 2, and 3 since this is when the Reactor Coolant System is pressurized and primary containment is required. In some instances, the valves are required to be capable of automatically closing during MODES other than MODES 1, 2, and 3. However, specific leakage limits are not applicable in these other MODES or conditions.

SR 3.6.1.3.11

This SR requires a demonstration that each instrumentation line excess flow check valve (EFCV) is OPERABLE by verifying that the valve activates within the required differential

(continued)

BASES

SURVEILLANCE REQUIREMENTS

SR 3.6.1.3.11 (continued)

pressure range. This SR provides assurance that the instrumentation line EFCVs will perform so that predicted radiological consequences will not be exceeded during the postulated instrument line break events (Ref. 7). The 18 month Frequency is based on the need to perform this Surveillance under the conditions that apply during a plant outage and the potential for an unplanned transient if the Surveillance were performed with the reactor at power.

REFERENCES

1. USAR, Chapter 15.6.5.
2. USAR, Section 15.6.4.
3. USAR, Section 15.7.4.
4. USAR, Section 6.2.
5. USAR, Table 6.2-47.
6. 10 CFR 50, Appendix J, Option B.
7. Regulatory Guide 1.11.

BASES

SURVEILLANCE REQUIREMENTS

SR 3.6.5.1.1 (continued)

properly accounted for in the measured bypass leakage and that each air lock is tested periodically. The leakage test is performed every 18 months, consistent with the difficulty of performing the test, risk of high radiation exposure, and the remote possibility that a component failure that is not identified by some other drywell or primary containment SR might occur. Operating experience has shown that these components usually pass the Surveillance when performed at the 18 month Frequency. Therefore, the Frequency was concluded to be acceptable from a reliability standpoint. In addition, if two consecutive tests fail to meet the leakage limit, a test shall be performed at least every 9 months until two consecutive tests meet the limit, at which time the 18 month Frequency may be resumed.

SR 3.6.5.1.2

The exposed accessible drywell interior and exterior surfaces are inspected to ensure there are no apparent physical defects that would prevent the drywell from performing its intended function. This SR ensures that drywell structural integrity is maintained. The Frequency was chosen so that the interior and exterior surfaces of the drywell can be inspected in conjunction with the inspections of the primary containment required by 10 CFR 50, Appendix J (Ref. 2). Due to the passive nature of the drywell structure, the specified Frequency is sufficient to identify component degradation that may affect drywell structural integrity.

REFERENCES

1. USAR, Chapter 6 and Chapter 15.
2. 10 CFR 50, Appendix J, Option B.

BASES

SURVEILLANCE REQUIREMENTS

SR 3.6.5.2.2 (continued)

The Surveillance is modified by a Note requiring the Surveillance to be performed only upon entry into the drywell.

SR 3.6.5.2.3

This SR requires a test to be performed to verify overall air lock leakage of the drywell air lock at pressures $\geq$ 3.0 psig. The 18 month Frequency is based on the need to perform this Surveillance under the conditions that apply during a plant outage and the potential for violating the drywell boundary. Operating experience has shown these components usually pass the Surveillance when performed at the 18 month Frequency, which is based on the refueling cycle. Therefore, the Frequency was concluded to be acceptable from a reliability standpoint.

This SR has been modified by two Notes. The first Note indicates that an inoperable air lock door does not invalidate the previous successful performance of an overall air lock leakage test. This is considered reasonable, since either air lock door is capable of providing a fission product barrier in the event of a DBA.

The Surveillance is modified by a second Note requiring the air lock to be pressurized to 19.7 psid prior to performance of the overall air lock leakage test. The 19.7 psid differential pressure is the assumed peak drywell pressure expected from the accident analysis. Since the drywell pressure rapidly returns to a steady state maximum differential pressure of 3.0 psid (due to suppression pool vent clearing), the leakage is allowed to be measured at this pressure.

REFERENCES

1. 10 CFR 50, Appendix J, Option B.
2. USAR, Chapters 6 and 15.

Clinton Power Station
10CFR50, Appendix J - Option B, Implementation Schedule

CLINTON POWER STATION
10CFR50, APPENDIX J - OPTION B
IMPLEMENTATION SCHEDULE

5/1/96 Commence development of document which will define and control the Primary Containment Leakage Rate Testing Program.

This may include:

1. Description of Program Requirements.
2. Control of Type A, B, and C testing intervals.
3. Methods of evaluating test results.
4. Administrative Limits for Type B and C components.
5. Maximum and Minimum pathway leakage algorithms for Type C components.
6. Record keeping requirements.
7. Database specification.

8/1/96 Complete development of Primary Containment Leakage Rate Testing Program document.

10/1/96 Complete changes to testing procedures necessary to support implementation of 10CFR50, Appendix J - Option B, and the Primary Containment Leakage Rate Testing Program.

Complete initial frequency determination and justification for extending testing intervals of components which will not be tested during the sixth refueling outage. Type B and C test frequencies will be based on the most recent Local Leak Rate tests performed.

10/13/96 (Start of RF-6) Implementation date of 10CFR50, Appendix J - Option B, Primary Leakage Rate Testing Program.

Note: It is intended that the implementation date of the 10CFR50, Appendix J - Option B, Primary Containment Leakage Rate Testing Program coincide with the actual starting date of the sixth refueling outage, currently scheduled for 10/13/96. Should operational requirements and events alter start of the refueling outage, then the actual date of implementation will shift accordingly.