

SEP 10 1990

In Reply Refer To:
Docket: 50-382/90-14

Entergy Operations, Inc.
ATTN: Ross P. Barkhurst, Vice President
Operations, Waterford
P.O. Box B
Millona, Louisiana 70066

Gentlemen:

Thank you for your letter of August 20, 1990, in response to our letter and Notice of Violation dated July 19, 1990. We have reviewed your reply and find it responsive to the concerns raised in our Notice of Violation. We will review the implementation of your corrective actions during a future inspection to determine that full compliance has been achieved and will be maintained.

Sincerely,
original signed by
Samuel J. Collins
Samuel J. Collins, Director
Division of Reactor Projects

cc:
Entergy Operations, Inc.
ATTN: Donald C. Hintz, Executive Vice
President & Chief Operating Officer
P.O. Box 31995
Jackson, Mississippi 39286

Entergy Operations, Inc.
ATTN: Gerald W. Muench, Vice President
Operations Support
P.O. Box 31995
Jackson, Mississippi 39286

Wise, Carter, Child & Caraway
ATTN: Robert B. McGehee, Esq.
P.O. Box 651
Jackson, Mississippi 39205

RIV:TPS
MEMurphy
9/7/90

C:TPS
WCSeidle
9/7/90

D:DRS
LJCallan
9/10/90

D:DRP
SJCcollins
9/10/90

Entergy Operations, Inc.

-2-

Entergy Operations, Inc.
ATTN: J. R. McGaha, Jr., General
Manager Plant Operations
P.O. Box B
Killona, Louisiana 70066

Entergy Operations, Inc.
ATTN: J. G. Dewease, Senior Vice
President, Planning & Assurance
P.O. Box 31995
Jackson, Mississippi 39286-1995

Entergy Operations, Inc.
ATTN: L. W. Laughlin, Site
Licensing Support Supervisor
P.O. Box B
Killona, Louisiana 70066

Monroe & Leman
ATTN: W. Malcolm Stevenson, Esq.
201 St. Charles Avenue, Suite 3300
New Orleans, Louisiana 70170-3300

Shaw, Pittman, Potts & Trowbridge
ATTN: Mr. E. Blake
2300 N Street, NW
Washington, D.C. 20037

Chairman
Louisiana Public Service Commission
One American Place, Suite 1630
Baton Rouge, Louisiana 70825-1697

Entergy Operations, Inc.
ATTN: R. F. Burski, Director
Nuclear Safety
317 Baronne Street
New Orleans, Louisiana 70112

Department of Environmental Quality
ATTN: William H. Spell, Administrator
Radiation Protection Division
P.O. Box 14690
Baton Rouge, Louisiana 70898

President, Parish Council
St. Charles Parish
Hahnville, Louisiana 70057

Entergy Operations, Inc.

-3-

Mr. William A. Cross
Bethesda Licensing Office
3 Metro Center
Suite 610
Bethesda, Maryland 20814

U.S. Nuclear Regulatory Commission
ATTN: Resident Inspector
P.O. Box 822
Killona, Louisiana 70066

U.S. Nuclear Regulatory Commission
ATTN: Regional Administrator, Region IV
611 Ryan Plaza Drive, Suite 1000
Arlington, Texas 76011

bcc to DMB (IE01)

bcc distrib. by RIV:

R. D. Martin	Resident Inspector
Section Chief (DRP/A)	DRP
DRSS-FRPS	MIS System
Project Engineer (DRP/A)	RSTS Operator
RIV File	DRS
M. E. Murphy	W. C. Seidle
A. Singh	
D. Wigginton, NRR Project Manager (NS: 13-D-18)	
Lisa Shea, RM/ALF	



Raymond F. Burski

W3P90-1184
A4.05
QA

AUG 22 1990

August 20, 1990

U.S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, D.C. 20555

Subject: Waterford 3 SES
Docket No. 50-382
License No. NPF-38
NRC Inspection Report 90-14
Reply to Notice of Violation

Gentlemen:

In accordance with 10CFR2.201, Entergy Operations, Inc. hereby submits in Attachment 1 the response to the violation identified in Appendix A of the subject Inspection Report.

If you have any questions concerning this response, please contact L.W. Laughlin at (504) 739-6726.

Very truly yours,

RFB/BRL/ssf
Attachment

cc: Messrs. R.D. Martin, NRC Region IV
D.L. Wigginton, NRC-NRR
E.L. Blake
W.M. Stevenson
R.B. McGehee
NRC Resident Inspectors Office

9008290088 (400)

IC-90-254

ATTACHMENT 1

ENTERGY OPERATIONS, INC. RESPONSE TO THE VIOLATION IDENTIFIED IN
APPENDIX A OF INSPECTION REPORT 90-14

VIOLATION NO. 9014-01

Failure to Comply with Technical Specification Requirements while Performing
the Local Leak Rate Tests for Containment Penetrations

Paragraph 4.6.1.2.d of Waterford Steam Electric Station, Unit 3 (W3) Technical Specifications requires that Types B and C local leak rate tests be conducted with the test pressure (Pa) at 44 psig.

Contrary to the above, the licensee conducted Types B and C local leak rate tests involving a number of containment penetrations, during the last three refueling outages, using a test method which allowed test pressure to drop below 44 psig during the test performance.

This is a Severity Level IV violation.

RESPONSE

(1) Reason for the Violation

Entergy Operations, Inc. admits this violation and as stated in Licensee Event Report number LER-90-007-00, believes that the root cause was an inadequate test procedure governing the Local Leak Rate Testing (LLRT) of containment isolation boundaries as required by the Waterford 3 Technical Specifications.

The NRC conducted an inspection during the period of June 25-29, 1990, which included a review of W3 containment local leak rate testing data. During this review, it was noted that 31 containment penetrations were local leak rate tested at test pressures less than the test pressure specified by W3 Technical Specifications.

W3 Technical Specification 4.6.1.2 requires that containment leakage rates shall be determined in accordance with the criteria specified in Appendix J of 10 CFR Part 50, and that Type B and C tests shall be conducted with gas at a pressure at Pa, 44 psig. Pa is the calculated peak containment internal pressure related to the leakage associated with the design basis accident. Type B and C tests detect local leaks and measure the leakage across pressure containing boundaries. Type B test penetrations are containment boundaries other than valves and type C test penetrations are containment isolation valves.

The containment electrical penetrations were tested in accordance with W3 Surveillance Procedure OP-903-114, Local Leak Rate Testing (LLRT), which utilizes the pressure decay method. The pressure decay method involves pressurizing the test volume and measures the change in pressure over a period of time to calculate the leakage rate. Section IWV-3423e of ASME Section XI allows the use of a correction factor, to correct for the decay in pressure, and normalize test results to the required test pressure. However, Procedure OP-903-114 did not include provisions for the use of a correction factor when the test pressure dropped below 44 psig. In those tests where pressure decay resulted in a test pressure less than 44 psig, the results (local leak rate) were less conservative than they would have been if a correction factor had been used.

(2) Corrective Steps That Have Been Taken and the Results Achieved

Immediate corrective actions included a review of LLRT activities conducted during the last three refueling outages. A total of 37 penetrations (31 penetrations in Refuel III were identified in the inspection, in addition to 3 penetrations each from both Refuel I and Refuel II) were identified as having been tested with test pressures less than 44 psig, without the appropriate correction factor applied to the test results. A correction factor was applied for each of the deficient penetration tests using a maximum correction factor based on paragraph IWV-3423(e) of ASME Section XI. The calculations resulted in leakage rate increases of 6.7 sccm (standard cubic centimeters per minute) for Refuel I, 2.3 sccm for Refuel II, and 24.7 sccm for Refuel III. Respective combined total leakage rates were calculated to be 36,275 sccm for Refuel I, 102,733 sccm for Refuel II, and 51,188 sccm for Refuel III. The combined total leakage rates for each refuel's testing were below the W3 Technical Specification 3.6.1.2 allowable of 630,697 sccm. Additionally, the adjusted leakage rate for each individual penetration was found to be acceptable and below given limits. Potentially Reportable Event number 90-33 and Licensee Event Report number LER-90-007-00 were issued in response to this concern.

In addition, a review of LLRT procedures other than OP-903-114 was conducted in an effort to identify additional deficiencies similar to those discussed above. This review did not identify any other deficiencies concerning the use of the pressure decay method for LLRT. A procedural update for OP-903-114 has been scheduled as a result of this review and the subject inspection. Prior to the procedural update, LLRT activities shall be administratively controlled to require the use of a test method other than pressure decay.

(3) Corrective Steps Which Will Be Taken to Avoid Further Violations

Corrective actions planned, but not yet complete are as follows:

- 1) Revise OP-903-114 to include precautions and limitations stating the minimum allowable test pressure of 44 psig as stated in Tech Spec 4.6.1.2.d.
- 2) Revise OP-903-114 to include a correction factor that normalizes reduced pressure test leakrates to 44 psig. Limit the use of the correction factor to "Information Only" tests where excessive leakage is the cause of reduced pressure. An alternate test method shall be used to validate any reduced pressure test.

It is believed that the revision of this procedure, coupled with the review of similar test procedures, will prevent the potential for future violations in this area.

(4) Date When Full Compliance Will Be Achieved

The procedures discussed above in Section 3 of this response will be revised by September 30, 1990, at which time Waterford 3 will be in full compliance.