

U. S. NUCLEAR REGULATORY COMMISSION

REGION III

Report No. 50-346/88024(DRS)

Docket No. 50-346

License No. NPF-3

Licensee: Toledo Edison Company
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300 Madison Avenue
Toledo, OH 43652

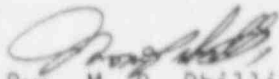
Facility Name: Davis-Besse, Unit 1

Inspection At: Oak Harbor, Ohio

Inspection Conducted: August 4 through October 20, 1988

Inspector:  R. Mendez

November 18, 1988
Date

Approved By:  M. P. Phillips, Chief
Operational Programs Section

November 18, 1988
Date

Inspection Summary

Inspection on August 4 through October 20, 1988 (Report No. 50-346/88024(DRS))

Areas Inspected: Routine, announced inspection by a Region based Inspector of Post Modification Procedure Review, Post Modification Test Witnessing, Containment Integrated Leak Rate Test (CILRT), CILRT Procedure Review, CILRT Test Witnessing, CILRT Test Results Evaluation, NRC modules utilized during this inspection included 72701, 70307, 70313 70323, and 61720

Results: Three violations were identified (failure to take adequate corrective action to lineup valves - Paragraph 5.b.(2); failure to perform an as-found local leak rate test - Paragraph 3.d; and failure to follow procedures and properly lineup valves - Paragraphs 3.a, 3.c.(1), 3.c.(4), 3.f.(3), and 5.b.(1)).

DETAILS

1. Persons Contacted

Toledo Edison Company

L. F. Storz, Plant Manager
#R. K. Flood, Assistant Plant Manager
#*J. Kasper, Operations Superintendent
+*E. Caba, Station Performance Supervisor
#J. E. Moyers, Quality Verification Manager
+*B. Shingleton, Licensing Engineer
#C. Ashworth, QA Surveillance
+*S. Honma, Compliance Supervisor
*E. Chimahusky, Performance Supervisor
*J. Wood, Systems Engineer
R. Garver, System Engineer
*M. Knaszck, Senior Design Engineer
J. Tabone, Test Leader
D. Gallegos, Test Leader
J. Nelson, Test Leader
S. Loeper, Test Leader
T. Knox, Test Leader
D. Johnson, Test Leader
T. Woodroffe, Test Leader
+R. Elfstrom, Performance and Senior Engineer
*S. Cjain, Nuclear Engineering Manager
*C. Daft, Technical Planning Manager
*J. Stotz, Associate Nuclear Engineer
*R. W. Shrauder, Nuclear Licensing Manager
*P. Hilderbrandt, Engineering Director
G. Gibbs, Performance Engineering Director
*N. Bonner, Maintenance Manager
#J. E. Moyers, Quality Verification Manager

Stone and Webster

#R. I. Parry, ILRT Consultant
#J. L. Barnes, ILRT Shift Test Director
#Q. E. Harper, ILRT Shift Test Director

Nuclear Regulatory Commission

#P. M. Byron, Senior Resident Inspector
*D. Kosloff, Resident Inspector

*Denotes persons attending the exit meeting of September 9, 1988.

#Denotes persons attending the exit meeting of September 30, 1988.

+Denotes persons attending the telephone conference calls on October 20, 1988.

The inspector also contacted other licensee personnel including members of the technical, operating, and regulatory assurance staff.

2. Post Modification Test Procedure Review

The inspector reviewed procedures for post modification testing, surveillance testing, and periodic testing which were used to verify the functional capability of plant systems. This review verified that the test procedures adequately demonstrated the functional capabilities of the systems in their anticipated operating conditions; were reviewed and approved by the appropriate management personnel; and contained appropriate acceptance criteria.

During the 1988 outage, the licensee initiated several changes to the Davis-Besse plant configuration. The major changes included modifying the auxiliary feedwater (AFW) system to install new DC powered modulating control valves and cavitating venturis to control steam generator level. Other changes to the auxiliary feedwater system included location changes to the control circuit and control switches to the Steam and Feedwater Rupture Control System (SFRCS)/AFW Panel; steam generator level control modifications; and additional control room and local indication. The inspector reviewed the procedures and observed the functional capability of the above modifications to the auxiliary feedwater system, the modifications to the motor driven feed pump, the SFRCS acceptance test and surveillance testing performed during the outage.

The following procedures were reviewed:

DB-SP-04152, Revision 00, "AFPT 1 HSS, LSS, and Overspeed Trip Test"

DB-PF-10037, Revision 00, "Makeup Feed and Bleed Mode 5 Test"

DB-SC-10067, Revision 00, "ICS/NNI Auto Select Test"

DB-PF-10059, Revision 00, "AFW System Auxiliary Steam Test"

DB-PF-10076, Revision 00, "Makeup Feed and Bleed Hydrostatic Tests"

DB-PF-10050, Revision 00, "Motor Driven Feed Pump System Flush and Acceptance Test"

DB-PF-10058, Revision 00, "Auxiliary Feedwater Level Control System Response Test"

DB-SC-03114, Revision 00, "SFAS Integrated Time Response Test"

DB-SP-04153, Revision 00, "AFPT 2 HSS, LSS, and Overspeed Trip Test"

DB-SP-10015, Revision 00, "HPI Test Line Performance Test"

DB-PF-10031, Revision 00, "AFW System Main Steam Tests"

DB-SP-10072, Revision 00, "LPI System Injection Test"

DB-PF-10020, Revision 00, "Remote Multiplexer - C4601 - Acceptance Test"

DB-SC-10073, Revision 00, "SFAS Block Switch Verification Test"

DB-PF-10061, Revision 00, "SFRCS Acceptance Test"

No violations or deviations were identified.

3. Post Modification Test Witnessing

The inspector observed post modification testing, surveillance testing, and periodic testing which were performed to verify the functional operability of the systems. Observations of testing verified that testing was performed in accordance with approved procedures; limiting conditions for operation were met; prerequisites and initial conditions were met; and that deficiencies during the performance of the test were adequately documented and resolved.

The inspector witnessed the following tests:

DB-SP-04152, Revision 00, "AFPT 1 HSS, LSS, and Overspeed Trip Test"

DB-PF-10037, Revision 00, "Makeup Feed and Bleed Mode 5 Test"

DB-SC-10067, Revision 00, "ICS/MNI Auto Select Test"

DB-PF-10059, Revision 00, "AFW System Auxiliary Steam Test"

DB-PF-10076, Revision 00, "Makeup Feed and Bleed Hydrostatic Tests"

DB-PF-10050, Revision 00, "Motor Driven Feed Pump System Flush and Acceptance Test"

DB-PF-10058, Revision 00, "Auxiliary Feedwater Level Control System Response Test"

DB-SP-04153, Revision 00, "AFPT 2 HSS, LSS, and Overspeed Trip Test"

DB-PF-10031, Revision 00, "AFW System Main Steam Tests"

DB-PF-10020, Revision 00, "Remote Multiplexer - C4601 - Acceptance Test"

DB-SC-10073, Revision 00, "SFAS Block Switch Verification Test"

DB-PF-10061, Revision 00, "SFRCS Acceptance Test"

The following are comments, observations, or problems identified while witnessing test performance.

- a. On August 9, 1988, the inspector witnessed portions of the Auxiliary Feedwater Pump Turbine (AFPT) 2 overspeed trip test, DB-SP-04153. Prior to the start of the test, the inspector asked the licensee if the valve lineup had been completed for the test. The inspector was shown the completed and signed off checklist required by Section 5.1 of the procedure. The inspector visually verified, with the help of an operator, the position of the valves as delineated in Procedure DB-SP-04153, Attachment 1: AFPT Valve Lineup. During the walkdown, the inspector identified to the operator that the AFPT 1-2 casing drain throttle Valve MS744A appeared to be closed, but that the valve lineup sheet required the valve to be open. The operator subsequently turned the hand wheel of the valve toward the open position and stated to the inspector that the valve had been cracked open. The inspector mentioned to the operator that the lineup sheet required the valve to be fully open and not cracked open. The inspector subsequently observed the AFPT 1-2 casing drain throttle Valve MS747A to be in the proper closed position when the operator believing that the valve was improperly positioned fully, opened the valve. The inspector notified the operator that he had incorrectly placed the valve in the wrong position. This valve is not required to be opened until Step 5.16.3 of Procedure DB-SP-04153. This failure by the licensee to follow procedures is a violation of 10 CFR 50, Appendix B, Criterion V (50-346/88024-1A).
- b. Prior to the start of the Steam Feedwater Rupture Control System (SFRCS) Test No. DB-PF-10061, the licensee found that they were unable to energize the the SCFRCS cabinet Channels 1 and 2. The licensee found that the 15 ampere fuses used in the power supplies of the SFRCS Channels 1 and 2 circuits could not sustain the initial inrush current. The licensee concluded that the fuses were undersized for the required application. The licensee issued Field Problem Resolution No. 87-1107-181 which initiated Calculation No. C-EE-017-01-001 to determine the proper fuse size. The licensee determined that the maximum peak inrush current of 76 amperes was sustained for a period of about one cycle. The licensee coordinated the size of the fuse with the protected device upstream and concluded that a 30 amp fuse would safely sustain the peak inrush current. The fuses were installed and the licensee performed an adequate test of the Channel 2 SFRCS cabinet.
- c. On March 30, 1988, during the performance of the local leak rate test (LLRT), Surveillance Procedure No. ST 5061.02, the licensee was unable to pressurize between containment isolation Valves CV 5085 and CV 5075. These valves are part of the containment vessel vacuum breaker system, Penetration No. 8F. Additionally, on April 7, 1988, the licensee failed to pressurize between containment isolation Valves CC 1407A and CC 1407B which are part of the component cooling water line from containment, penetration No. 4. Furthermore, the inspector was informed that the licensee was unable to pressurize or quantify the leakage rates of Penetrations 12, 42A, 73B, and 82. Failure to pressurize and consequently to quantify the leak between

the valves caused the licensee to apparently exceed the limit of technical specification Section 3.6.1.2.b. This section of the Technical Specifications required that containment integrity be maintained and that the containment leakage rate shall be less than 0.60 La for all penetrations and valves subject to Type B and C tests. The licensee performed the surveillances on the containment isolation valves approximately three weeks after shutdown for refueling. On May 6, 1988, the licensee issued a Potential Condition adverse to Quality Report (PCAQ) No. 88-343. The PCAQ identified several valves which failed to meet the acceptance criteria during surveillance testing. The inspector discussed failure of the above valves and penetrations with the licensee. The inspector informed the licensee that whenever technical specifications are exceeded, 10 CFR 50.73 requires that a Licensee Event Report (LER) shall be issued within 30 days after the discovery of the event. In addition, 10 CFR 50.71 states that the licensee shall report an event regardless of the plant mode and regardless of the significance of the structure or component. The inspector informed the licensee that the issue was not containment integrity, but the reportability of the event since it was reasonable to assume the valve in question had degraded somewhere in the operating cycle and not during the three weeks the unit was shutdown. It was the inspector's concern that degradation of the valves was a progressive process and did not occur instantaneous as with switches or relays.

It was the licensee's position that they had not violated Section 3.6.1.2.b of their Technical Specifications since this section applies in Modes 1 through 4 and was not applicable at the time the containment isolation valves were tested. In particular, the licensee referenced NUREG-1022, Supplement 1 which provides guidance on the reportability rule of 10 CFR 50.73. The licensee cited Question and Answer 2.3 on Page 4 of the supplement, which states as follows:

Question: We believe that surveillance testing and redundancy together promise assurance of operability. Further, we often have 7-day LCOs and we perform surveillance tests on 30-day intervals. Is an LER required every time we find a problem during surveillance testing?

Answer: No. In general, for the purpose of evaluating the reportability of situations found during surveillance tests, it should be assumed that the situation occurred at the time of discovery, unless there is firm evidence to believe otherwise. For example, if a standby component with a 7-day LCO is found to be inoperable because it was assembled improperly during the maintenance conducted 30 days previously, then there is firm evidence that it had been inoperable for the entire 30 days, and an LER is required.

In summary, the licensee's position was that since they had no knowledge of the degradation of the valves while the plant was operating, they did not have to report the event. The licensee stated that an LER was not required since they had no reason to suspect improper maintenance during the previous outage. Furthermore, the licensee stated that the containment boundary had not been degraded since at least one of the two valves in each penetration boundary passed the local leak rate test. The licensee took corrective action to repair the valves. With respect to Penetration 8F, the licensee cleaned and replaced worn parts on Valve CV 5085, but performed maintenance on Valve CV5075, (See paragraph 3.d). A local leak rate test was performed with satisfactory results. The valves on Penetration No. 4 required no actual repairs. The limit switch settings on the motor operator for Valve CC1407A were reset and no work was performed on CC1407B. A local leakage rate test for information only was performed with satisfactory results. Corrective action on Penetrations 13, 42A, 73B and 82 will be reviewed in a subsequent inspection.

On September 9, 1988, the inspector held an exit interview with the licensee. During the exit, the inspector stated that although the reporting requirements of 10 CFR 50.73 and NUREG-1022 were not always clear, exceeding 0.6 La for Type B and C tests should not mean that the limit was exceeded during operation, but that as a minimum exceeding the limit of 0.6 La required reporting the event through an LER.

The inspector's concern was that the licensee was interpreting Section 3.6.1.2.b of their Technical Specifications such that the licensee would not report exceeding the 0.6 La limit under most circumstances. For example, the applicable modes for Section 3.6.1.2.b of the Technical Specifications are 1, 2, 3, and 4. In general, the licensee cannot test and is not required to test in the above modes. Once the licensee shuts down for refueling, the applicable modes no longer apply and, consequently, the licensee would not be required to report excessive leaking valves which exceed the 0.60 La limit. In addition to the above concern, reporting of the 0.60 La limit is indicative of how well licensee's maintain their containments boundaries and containment isolation valves.

On September 13, 1988, the licensee called the Region to discuss further the reporting requirement. The Region agreed with the licensee that the Davis-Besse Technical Specification and NUREG-1022 leave room for interpretation for reporting events. This issue is unresolved pending further resolution and will be forwarded to NRR (50-346/88024-02).

- d. On March 30, 1988, the licensee performed a local leak rate test (LLRT) on penetration 8F by pressurizing between motor operator valve (MOV) CV5075 and check valve CV5085. The testing personnel were unable to quantify the leakage between the valves but determined that the check valve was leaking excessively. No work on CV5075 was to be performed until CV5085 was repaired. Valve

CV5085, was disassembled, maintenance performed, cleaned, inspected and reassembled. During this time, the licensee issued Maintenance Work Order (MWO) 3-88-783-01 to initiate action to remove the limit switch and perform maintenance on valve CV5075. The MWO required a verification that the pre-maintenance LLRT had been performed, however, the MWO was incorrectly signed off. Consequently, maintenance was performed on valve CV5075 without determining a leakage value in the as found condition.

The "as found" condition is required by 10 CFR 50, Appendix J and is the condition of the containment at the beginning of the outage prior to any repairs or adjustments (RAs) to the containment boundary. 10 CFR 50, Appendix J, paragraph III.A.1 requires that "During the period between the initiation of the containment inspection and the performance of the Type A test, no repairs or adjustments shall be made so that the containment can be tested in as close to the "as is" condition as practical." ANSI N45.4-1972, paragraph 4.2 requires that; "For retesting, an initial record proof test shall be conducted at time periods and pressures established by the responsible organization, before any preparatory repairs are made. This will disclosed the normal state of repair of the containment structure and a record of the results shall be retained." The NRC's position on the "initial record proof test" requirement, is that it may be waived, provided the Type A test results are back corrected for all RAs to the containment boundary made prior to the performance of the Type A test.

If RAs are made to the containment boundary prior to the Type A test, local leak rate tests must be performed to determine the leakage rates before and after the RAs. The "as found" Type A test results can then be obtained by adding the difference between the affected path leakages before and after RAs to the overall Type A test results. These "as found" leakage rate results are required and carry the same reporting requirements as the other Type A, B and C test results. An acceptable methodology to back correct the Type A test results is the minimum pathway leakage as described in paragraph 4.b.(2) of this report.

On October 20, 1988, the licensee and the inspector further discussed the above issue. The licensee stated that although maintenance had been performed on valve CV5075, and the limit switch was removed from the MOV, no repairs or adjustments were "made to the valve. In addition, the licensee had previously issued Potential Condition Adverse to Quality (PCAQ) Report No. 88-0343 which addressed excessive leaking penetrations and evaluated removal of the limit switch. The PCAQ stated that removal of the limit switch was performed in accordance with procedure MP 1411.06, which dis-engaged the limit switch at a known point in travel and reinstalled it at the same point, and according to the licensee, this precluded changes in the seating characteristics of the valve. The licensee also compared stroke times of the valve both before and after maintenance and found that the differences were within three to four hundredths of a second. In addition, the licensee performed an as left LLRT on penetration 8F with good results.

The inspector agreed with the licensee's evaluation which indicated that containment integrity probably had not been compromised, although the licensee originally failed to pressurize between the two valves. However, it was the inspector's concern that the licensee lost control of valve CV5075 when an improper sign off of the MWO resulted in maintenance being performed, on the valve, before the leakage rate between the valves was quantified.

The failure to perform an as-found local leak rate test on penetration 8F is considered a violation of 10CFR 50, Appendix J (346/88024-03).

Due to the licensee's technical evaluation of valve CV5075 this item does not require a response.

- e. On August 11, 1988, the inspector observed that the sensing line connections from the flow element of the auxiliary feedwater system to flow Transmitter FT-6424, appeared not to be connected properly. The high pressure and low pressure sensing lines were not connected correctly to their respective high and low sides of the flow transmitter. Flow Transmitter FT-6426 is a new Class 1E differential pressure based instrument which taps off the existing orifice plate in the AFW flow line and provides flow indication in the control room. The inspector notified the systems engineer of the discrepant condition and discussed installation of the transmitter with the modifications department. The inspector asked the licensee if the installation had been QC inspected. The inspector was informed that the installation of the transmitter had not been final QC inspected due to a code change on the root valve welds. The licensee indicated that as soon as the required non-destructive test was performed, the installation would be final QC inspected. The inspector reviewed installation documents in the Field Change Request (FCR) No. 87-0069 package and noted that the licensee had not identified the incorrect connections to the transmitter. On August 12, 1988, after the inspector had identified the problem, the licensee field inspected the transmitter and found the instrument sensing lines reversed. The licensee issued Field Change Notice 9116. On a subsequent field inspection during the CILRT, the inspector noted that the connections to flow Transmitter FT-6426 had been corrected.

- f. With respect to DB-PF-10050, the inspector had the following comments:

- (1) On August 10, 1988, the licensee tested the motor driven feed pump (MDFP) and performed Section 6.2 of Procedure DB-PF-10050. This section tests the MDPF discharge lines to the test line return of the condensate storage tank. During performance of Steps 6.2.1 through 6.2.6, the inspector noted that a six inch globe Valve FW174 was being throttled. The initial valve lineup for this valve is that the valve be open. Valve FW174 is not required to be throttled closed until Step 6.2.38. Additionally, the inspector noted that the test leader skipped Steps 6.2.25 and 6.2.27 and continued with Steps 6.2.28 through 6.2.35. Step 6.2.25 requires that the vibration on the motor

driven feedpump be within prescribed limits and Step 6.2.27 requires that instrument tubing to Valve FW 5884 be reconnected. At about Step 6.2.35, the inspector spoke with the test personnel who were performing the vibration checks and asked if they had conveyed any information to the test leader on the acceptability of the vibration on the MDFP. The test personnel stated that they had not conveyed the information, but indicated that the vibration appeared to be acceptable. The test leader continued with the test until Step 6.2.38, at this time the inspector asked why Steps 6.2.25 and 6.2.27 had not been signed off. The test leader stated he had not received any information on the unacceptability of the vibration and signed Steps 6.2.25 and 6.2.27. The licensee's Procedure AD 1801.00, Acceptance Test Program, under Test Conduct, Section 6.4.1.d, required that "Procedure steps and sections shall be performed in numerical sequence unless otherwise noted in the test procedure." The failure by the licensee to assure that steps in a test procedure were performed in numerical sequence and that procedures were adequately followed is considered another example of a violation 10 CFR Part 50, Appendix B, Criterion V (336/83024-01B).

- (2) The licensee continued with the test and attempted to throttle close Valve FW174. The further Valve FW174 was throttled closed, the more the piping to the condensate storage tank (CST) vibrated. Vibration of the line continued until another valve FW127 rattled open causing the water from the CST to spill on the floor. The test was stopped.

On August 11, 1988, the licensee resumed the test and again attempted to throttle close Valve FW174. Excessive vibration on the piping was experienced again and the packing on Valve FW 174 started to come apart with water spilling out through the sides and packing of the valve. The test was stopped once again. The licensee subsequently informed the inspector that the valve may not be suitable for its present application. The licensee indicated that the six inch globe valve was actually a steam valve and was not suitable for feedwater. However, valve FW174 is installed in a test line which discharges into the CST and is not used during normal operation. The licensee is in the process of determining an alternate method to create the required pressure drop across the test line. The licensee plans to cut the valve out and place three orifices in series to obtain the required pressure drop.

- (3) On September 7, 1988, the inspector witnessed portions of Section 6.4 in Procedure DB-PF-10050. In this part of the procedure, the MDFP discharges into the steam generators. The test leader was reperforming Section 6.4 for the third time, since an acceptable inspection on the water quality through the AFW strainer had not been attained. While the test leader was performing Step 6.4.9 of the procedure, he noticed that Valve AF3872 was in the open position. The test leader called a reactor operator who placed the valve in the closed position. The inspector subsequently reviewed

Note 6.4 of Procedure DB-PF-10050. The note references Attachment 9 of the procedure for the initial valve lineup. Attachment 9 of Procedure DB-PF-10050 requires the Valve AF3872 be in the closed position prior to the start of the test. The test leader indicated that Valve AF 3872 may have been opened during performance of Test DB-PF-10058 on the evening of the previous day (September 6, 1988). The failure to properly check prerequisites prior to entering a test and failure to assure that procedures are adequately followed is considered a violation of 10 CFR Part 50, Appendix B, Criterion V (346/88024-01C).

- (4) On September 7 and 8, 1988, the inspector witnessed reperformance of the motor driven feed pump flush test (DB-PF-10050) Section 6.4. In this section, the test leader has the option of repeating the steps if during flushing of the motor driven feed pump the water quality is not acceptable. The inspector noted during test witnessing that the test leader was not resigning the steps in Section 6.4. Steps 6.4.1 through 6.4.17 had been reperfomed on September 6, 7, and 8, 1988 in order to obtain an acceptable water quality during flushing of the line. Davis-Besse procedure Acceptance Test Program, AD 1801.00, Section 6.4.6 allows steps to be repeated as long as the required conditions are present. The procedure further states, "Repeated steps shall be documented by resigning the individual affected steps." 10 CFR 50, Appendix B, Criterion XI, Test Control, required that test results shall be documented and evaluated to assure that test requirements have been satisfied. The inspector noted that during reperformance of Section 6.4, the test leader was visually following the steps, but did not document the test results of the three reperformances of Section 6.4.1. The failure to follow procedures is another example of a violation of 10 CFR Part 50, Criterion V (50-346/88024-01D).

4. Containment Integrated Leak Rate Test Procedure Review

a. Procedure Review

The inspector reviewed Procedure No. DB-PF-03009, dated September 7, 1988, "Containment Integrated Leak Rate Test," relative to the requirements of 10 CFR 50, Appendix J, ANSI N45.4-1972 and the Technical Specifications.

b. Summary of Appendix J Requirements

To ensure the licensee's understanding of Appendix J requirements, the inspector conducted discussions with licensee personnel during the course of the inspection. The following is a summary of the clarifications not discussed with the licensee during the previous CILRT as documented in Inspection Report No. 346/84029.

- (1) The only method of data reduction acceptable to the NRC are total time or point-to-point as described in ANSI N45.4-1972, including a statistically calculated instrument error analysis.

The following options are available to the licensee and are suggested in the following order:

- (a) Total time (< 24 hour duration test), in accordance with Bechtel Corp. Topical Report BN-TOP-1, Revision 2. Whenever this method is used BN-TOP-1 must be followed in its entirety except for any section which conflicts with Appendix J requirements.
 - (b) Total time (> 24 hour duration test) using single sided 95% UCL.
 - (c) Proposed Regulatory Guide MS 021-5, Regulatory Position 13. If this method is utilized, the licensee must submit an exemption request to NRC and receive approval for its use prior to the expiration of the Type A test frequency requirements stated in Technical Specifications.
- (2) Periodic Type A, B, and C tests must include as-found results as well as as-left. If Type B and C tests are conducted prior to a Type A, the as-found conditions of the containment must be calculated by adding any improvements in leakage rates, which are the results of repairs and adjustments (RA), to the Type A test results using the "minimum pathway leakage" methodology. This method requires that:
- (a) In the case where individual leak rates are assigned to two valves in series (both before and after the RA), the penetration through leakage would simply be the smaller of the valves' leak rates.
 - (b) In the case where a leak rate is obtained by pressurizing between two isolation valves and the individual valve's leak rate is not quantified, the as-found and as-left penetration through-leakage for each valve would be 50% of the measured leak rate if both valves are repaired.
 - (c) In the case where a leak rate is obtained by pressurizing between two isolation valves and only one valve is repaired, the as-found penetration leak rate would conservatively be the final measured leak rate, and the as-left penetration through leak rate would be zero (this assumes the repaired valve leaks zero).
- (3) Penetrations which are required to be Type C tested, as described in the FSAR and SER, must be vented inside and outside the containment during the CILRT. All vented penetrations must be drained of water inside the containment between the penetration valves to assure exposure of the containment isolation valves to containment air test pressure. The degree of draining of vented penetrations outside of containment is controlled by the requirement that

the valves be subjected to the post-accident differential pressure or proof that the the system was built to stringent quality assurance standards comparable to those required for a safe system.

- (4) The CILRT must be noted in the test log at the time the licensee determines that the containment stabilization has been properly completed. Reinitializing a test in progress must be "forward looking" that is, the new start time must be the time at which the decision to restart is made. This also implies that the licensee has determined that the test has failed, and has enough data to quantify the leakage rate. Any deviation from these positions should be discussed, and documented, with the NRC inspector as they occur to avoid later invalidations of the test results. Examples of acceptable deviations of reinitializing the start time of the test in the past are: time at which a leaking penetration which has an obvious effect on the test data was secured; accidental opening and later closing of a valve which has an obvious effect on the test data, and the time at which an airlock outer door was closed and the inner door was open.
- (5) The supplemental or verification test should start within one hour after the completion of the CILRT. If problems are encountered in the start of the supplemental test, data recording must continue and be considered part of the CILRT until the problems are corrected and the supplemental test can begin.
- (6) During a CILRT, it may become necessary to reject or delete specific sensors or data points due to drifting or erroneous sensors, or data outliers. Data rejection criteria should be developed and used so that there is a consistent, technical basis for data rejection. One example of an acceptable method for data outliers is considered in an Appendix to ANSI/ANS 56.8-1981. Sensor data rejection criteria should be plant specific and based upon a sensor's trend relative to the average scatter, slope, and/or absolute output of the sensor.
- (7) The water level in the steam generators during the CILRT must be low enough to ensure it does not enter the main steam lines unless flooding of the main steam lines is called for in the loss of coolant emergency procedure.
- (8) Test connections must be administratively controlled to ensure their leak tightness or otherwise be subject to Type C testing. One way to ensure their leak tightness is to cap, with a good seal, the test connection after its use. Proper administrative controls should ensure valve closure and cap reinstallation within the local leak rate testing procedure, and with a checklist prior to unit restart.

- (9) Whenever a valve is replaced, repaired, or repacked during an outage for which Type A, B, and/or C surveillance testing was scheduled, local leak rate testing for the as-found as well as the as-left condition must be performed on that penetration. In the case of a replaced valve, the as-found test can be waived if no other containment isolation valve of similar design exists at the site.
- (10) The periodic retest schedule for each penetration subject to Type B or Type C testing, except for airlocks and penetration employing a continuous leakage monitoring system, shall be every refueling outage, but in no case shall the interval be greater than two years.

5. Containment Integrated Leak Rate Test Witnessing

a. Instrumentation

The inspector reviewed calibration data and determined that the instruments used in the CILRT had been properly calibrated and that the correct weight factors had been placed in the computer program as required. The following instrumentation was used.

<u>Type</u>	<u>Quantity</u>
RTD's	30
Humidity	10
Pressure Gauges	2
Flowmeter	1

b. Witness of Test

The inspector witnessed portions of the CILRT on September 25-30, 1988, and noted that test prerequisites were met (except where noted below) and that the appropriate revision to the surveillance procedure was followed by test personnel. Valve lineups for the following systems were verified to ensure that adequate venting and draining was provided:

<u>System</u>	<u>Penetration</u>
Pressurizer Quench Tank Circulating Inlet	41
Service Air	42A
Containment Air Supply	43A
Containment Vessel Air Sample Return	43B
Core Flooding Tank Fill and Nitrogen Supply	44A
Containment N ₂ Supply Header	44B
Core Flooding Tank Sample	47A
Core Flooding Tank Vent	47B
Pressurizer Quench Tank Circulating Outlet	48
Hydrogen Purge System Exhaust	51
Hydrogen Dilution System Supply	67

Pressurizer Quench Tank Sample	68A
Containment Air Sample	68B
Hydrogen Dilution System Supply	69
Containment Air Sample	71B
Core Flooding Tank Fill and N ₂ Supply	71C
Containment Pressure Sensor	73A

- (1) On the evening of September 25, 1988, the licensee had almost completed the valve lineups and indicated that they were ready to close containment and start pressurization. At about 9:00 p.m., with assistance from an operator, the inspector entered containment to observe valve lineups and verify the valve positions against the CILRT procedure. While observing the valve lineups, the inspector noted that Red Danger Tag No. 639 on Valve SS165 (Quench Tank to Sample Leak Valve) required the valve to be open, but the valve was in the closed position. The CILRT procedure also required the valve to be in the open position. The operator notified the control room and asked for permission to change Valve SS165 to its proper open position. Permission was granted, but the control room notified the operator a short time later that Valve SS165 had not been double verified. Davis-Besse's Safety Tagging Procedure AD 1803.00 requires a verification and an independent verification when equipment is taken out of service and Red Danger Tags are installed on out of service components or equipment. At about midnight, the inspector completed verification of the selected valves and discussed the apparent mispositioning of Valve SS165 with the Shift Technical Engineer who was in the control room. The inspector reviewed the tagging log and noted that the entries for Valve SS165 showed that the valve had been previously positioned for the CILRT, but the verification and independent verification initials had been lined out. The inspector observed what appeared to be an additional entry in the previously lined out verification block for Valve SS165 indicated that the valve may have been verified, but not double verified. The inspector reviewed the tagging log further and noted numerous entries which had been lined out and some which appeared to be incorrect or ambiguous. The inspector noted that the verification block for Red Danger Tag No. 67, Valve CF104 had not been initialed indicating that the valve had not been positioned for the CILRT. When the inspector entered containment a second time and found Tag No. 67 was found hanging from the valve. Additionally, the verification and independent verification blocks were lined out for Tag No. 310, Valve NN72 indicating that the valve was not positioned for the CILRT; however, the Assistant Shift Supervisor stated that the valve had been repositioned for the CILRT the day before, but the verification and independent verification blocks had not been initialed. The inspector also noted that as a practice when repositioning valves, the licensee does not cross out the verification blocks, but issues temporary lifts. The practice of crossing out initials; however is not disallowed by the licensee's procedure. Although the licensee had not

completed the positioning of all the valves for the CILRT, they appeared to have poorly maintained an accurate up to date tagging log in the control room.

On September 26, 1988, the licensee initiated a triple verification of the valve lineup due to concerns expressed by the NRC inspector. The licensee found that Valves SA508 and MS883 were not in the position required by Section 3.1, Attachment 2 of the CILRT Procedure DB-PF-03009. Although Valves SA508 and MS883 had already been verified and independently verified, they were both in the open position, but required to be closed for the CILRT. The failure to adequately lineup valves and follow procedures is a violation of 10 CFR 50, Appendix B, Criterion V (50-346/88024-1E).

- (2) On September 27, 1988, at about 5:45 a.m., the licensee started to pressurize containment. During pressurization, the licensee started to notice an increase in pressurizer level from about 180 inches to 220 inches. The overflow level for the pressurizer is 320 inches. At about 9:00 a.m., the Shift Supervisor suspended pressurization when the level reached 300 inches and the containment pressure was 8.5 psig. The licensee theorized that a loop seal had formed in the pressurizer vent line which caused the pressurizer to be at a lower pressure than the rest of containment. The lower pressurizer pressure caused water to flow from the steam generators into the pressurizer. The licensee made plans to create an additional pressurizer vent path and send a team into containment without having to depressurize the containment. The licensee entered containment at 8:19 p.m. on September 27, 1988, and found that motor operated Valve RC 239A which should have been opened to establish the vent path, was in the closed position. The licensee manually opened Valve RC 239A and the pressurizer level dropped to approximately 100 inches. The licensee stated that Valve RC239A had been verified as being open, but that the valve had malfunctioned thus giving an erroneous indication. The inspector determined that it was licensee's practice to position motor operator valves, verify the position and remove the power source to the valve prior to the start of CILRTs. Removal of power source also removed the valve position indication in the control room. Potential Condition adverse to Quality Report No. 88-0778 was issued to investigate the apparent malfunctioning of the valve. The licensee continued with pressurization and reached accident pressure with no further complications. However, the mispositioning of Valve RC239A is another example of the licensee's inattention to detail to assure that valves are properly positioned prior to the start of testing. In addition, on September 28, 1988, after the licensee restored electrical power to the valve, the inspector verified control room indication and observed that Valve RC239A was in the

proper open position. Further discussions with the compliance supervisor (on October 7, 1988) indicated that the mispositioning of Valve RC239A was due to personnel error. The licensee has cycled Valve RC239A since the CILRT and determined that there were no problems with the operability of the valve or with control room indication. The failure to take proper corrective action is a violation of 10 CFR 50, Appendix B, Criterion XVI (50-346/88024-04).

6. CILRT Test Results Evaluation

a. CILRT Data Evaluation

An 8 hour short duration, CILRT was performed on September 29, 1988, at approximately 52.7 psia following satisfactory completion of the required temperature stabilization period. Data was collected every 15 minutes. The inspector independently monitored and evaluated leak rate data using total time (Bechtel Topical Report BN-TOP-1, Revision 1), formulas to verify the licensee's calculations of the leak rate and instrument performance. There was excellent agreement between the inspector's results as indicated by the following summary (units are in weight percent per day):

<u>Measurement</u>	<u>Licensee</u>	<u>Inspector</u>
Leak rate measured during CILRT (Lam)	-0.008	-0.008
Lam at upper 95% confidence level	0.051	0.051

Appendix J acceptance criteria at 95% UCL: $<0.75 L_a = <0.375$ weight percent per day.

b. Supplemental Test Data Evaluation

After the satisfactory completion of the CILRT, a known leakage rate (based on the inspector's independent readings and calculations) of 35 SOFM, equivalent to 0.493 weight percent per day at accident pressure was induced. Data was collected and analyzed by the licensee every 15 minutes. The inspector independently monitored and evaluated leak rate data to verify the licensee's results. After 4 hours, the supplemental test was terminated with excellent results as indicated by the following summary (unit are in weight percent per day):

<u>Measurement</u>	<u>Licensee</u>	<u>Inspector</u>
Measured leak rate Lc during supplement test	0.457	0.457
Induced leak rate, Lo	0.495	0.493
Lc - (Lo = Lam)	-0.030	-0.028

Appendix J acceptance criteria: $-0.125 \leq [L_c - (L_o + L_m)] \leq +0.125$, as indicated above, the licensee's test results were satisfactory.

c. CILRT Valve Lineup Penalties

Due to penetration configuration which deviate from the penetration lineup requirement for the CILRT, the results of local leak rate tests for each penetration must be added to L_m at the 95% UCL. The following penalties must be added using the minimum pathway leakage for the following penetrations or possible sources of inleakage.

<u>Penetration/Equipment</u>	<u>Leak Rate (units are in SSCM)</u>
CCW Outlet Line from Containment	525
CCW Supply to Containment	0
CCW Supply to CRDMs	50
Containment Spray Line	145
Decay Heat Pump Suction Line	350
Containment Vessel Purge Outlet Line	0
Reactor Coolant Pump Seal Water Return	0
Electrical Penetrations (P-102)	832

Total = 1,903 SCCM = 0.002 wt. %/day

No violations or deviations were identified.

d. As-Found Condition of CILRT Results

The as-found condition is the condition of the containment at the beginning of the outage prior to any repairs or adjustments (RA's) to the containment boundary. If RA's are made to the containment boundary prior to the Type A test, local leak rate tests must be performed to determine the leakage rates before and after the RA's. The as-found Type A test result can then be obtained by adding the difference between the affected leak path leakage before and after RA's to the overall Type A test results.

The inspector reviewed as-found and as-left local leak rate test results to determine an as-found Type A test result. The licensee is limited to the Appendix J limit of $<0.75 L_a$ or <0.375 wt %/day leakage. The following is a summary of the as-found containment leak rate (units are in wt. %/day).

<u>Measurement</u>	<u>Leak Rate</u>
Penalties incurred due to RA's adjustments prior to the CILRT	0.028
Valve lineup penalties	0.002
As-left Type A test results	0.051
Total as-found	0.081

The licensee passed the CILRT in the as-found condition.

7. Unresolved Items

An unresolved item is a matter about which more information is required in order to ascertain whether it is an acceptable item, an open item, a deviation, or a violation. An unresolved item identified during the inspection is discussed in Section 3.c.

8. Exit Interview

The inspector met with licensee representatives denoted in Paragraph 1 during the inspection on September 9 and 30, 1988, and at the conclusion of the inspection on October 20, 1988. The inspectors summarized the scope and findings of the inspection. The licensee acknowledged the information and did not indicate that any of the information disclosed during the inspection could be considered proprietary in nature.

Licensee: TOLEDO EDISON COMPANY	Draft Completion Date:	Report No(s): 50-346/88024
Facility(s): DAVIS-BESSE - UNIT 1	Initial Typing:	Inspection End Date: 10/20/88
	Received _____ Start _____ End _____	Inspector(s): MENDEL
License No(s): NPF-3	*Inspector Review: Start _____ End _____ Date Mailed: _____ Date Received: _____	

[illegible]

NOTES **		Issue Date:	
Note No.	Comment	Licensee	HQ (D&B)
①	Inspector performed Palisade Inspection & PI inspections after this inspection completed but before write-up completed.	11/21/88	11/21/88
		Proprietary Review Notif.	
		Telephone	Due Received
		Written	Due Received
		Licensee Response:	
		Due	Issued Received
		Thank You Letter:	
		Due	Issued
		Form 591 Applicable?	
		Yes	No
		Issued From:	
		Field	Office

RP 0516B

SALP FUNCTIONAL AREA ASSESSMENT AND PRELIMINARY INSPECTOR EVALUATION FORM

Facility: Davis-Besse Inspection Report No.: 50-346/38024

FUNCTIONAL AREAS	✓	I	II	III	IV	V	Dev	Int	Rating	
PLANT OPERATIONS										
RADIOLOGICAL CONTROLS										
MAINTENANCE										
SURVEILLANCE	✓							1	2	
FIRE PROTECTION										
EMERGENCY PREPAREDNESS										
SECURITY										
OUTAGES										
QUALITY PROGRAMS & ADMIN. CONTROLS AFFECTING QUALITY										
LICENSING ACTIVITIES										
TRAINING & QUALIFICATION EFFECTIVENESS										
SOILS AND FOUNDATIONS										
CONTAINMENT, SAFETY-RELATED STRUCTURES & MAJOR STEEL SUPPORTS										
PIPING SYSTEMS & SUPPORTS										
SAFETY-RELATED COMPONENTS MECHANICAL										
AUXILIARY SYSTEMS										
ELECTRICAL EQUIPMENT AND CABLES										
INSTRUMENTATION										

*Functional areas for Construction and Operations

CRITERIA FOR DETERMINING CATEGORY RATING

1. Management Involvement in Assuring Quality.
2. Approach to Resolution of Technical Issues from a Safety Standpoint.
3. Responsiveness to NRC Initiatives.
4. Enforcement History.
5. Operational and Construction Events.
6. Staffing (including management).

RATING KEY: (For Categories 2 - Declining and 3, provide narrative basis for conclusion)

Category 1
Category 2

Category 2 - Declining
Category 3

☒ Inspector(s) concerns adequately addressed or

☐ Inspection Evaluation Form being processed.

Lead Inspector R. Munda 10/20/84 Section Chief
(Signature) (Date)

(Signature) (Date)
March 3, 1986

OUTSTANDING ITEM LIST (OIL) TRACKING FORM

Submitted by: R. Mendez

Sec. Chief Approval _____

Item No.	Type Code	Func. Area	Date Entered
<u>346188024-01</u> (Unit 1)	<u>NC4</u>	<u>04</u>	<u>10112188</u>
<u>1</u> (Unit 2)			

Original Inspector	Resp. Sec.	Note
<u>MENDEZ</u>	<u>---</u>	<u>---</u>

Responsible Inspector	Closed	Final Report
<u>MENDEZ</u>	<u>1 1</u>	<u>---</u>

Interim Insp. Reports			
<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>

Followup Date	Remarks:
<u>1 1</u>	<u>FAILURE TO ADEQUATELY PERFORM TESTING AND PROPERLY</u> <u>PROPERLY LINEUP VALVES</u>

Status Code	
<u>---</u>	<u>---</u>

TYPE CODE

AEO - ABNORM. ENVIR. OCC.	ORD - ORDERS TO LICENSEE
ALG - ALLEGATION	OTH - OTHER
BUL - BULLETIN	P20 - 10 CFR PART 20
CAL - CONFIR. ACTION LTR.	P21 - 10 CFR PART 21
CIR - CIRCULAR	R3R - REGION III REQUESTS
DEV - DEVIATION	REC - RECOMMENDATIONS
GLR - GENERIC LETTER	RIP - REGULATORY IMPROVEMENT PROGRAM
IAL - IMMEDIATE ACTION LETTER	SEP - SAFETY EVAL. PROGRAM
INF - INFORMATION NOTICE	SER - SAFETY EVAL. REPORT
LER - LICENSEE EVENT REPORT	SGR - 73.71 SAFEGUARDS REPORTS
NC - NON-COMPLIANCE (1-2-3-4-5)	SSF - SIGNIFICANT SAFETY FINDING
NVS - NO VIOLATION 10 CFR 2, APP. C SEC. V.A	TMI - THREE-MILE ISLAND ACTION ITEMS
OPN - OPEN ITEM	UNR - UNRESOLVED ITEMS
	WON - WITHDRAWN

FUNCTIONAL AREA

1. OPERATIONS
2. RAD - CHEM
3. MAINTENANCE
4. SURVEILLANCE
5. EMERGENCY PREP
6. SEC/SAFEGUARDS
7. OUTAGES
8. TRAINING
9. LICENSING
10. QUALITY ASSURANCE
11. OTHER
12. FIRE PROT/H-K

REGION

EPS	P17
FRP	P18
NLS	P27
NOS	P29
NPS	P3A
NH1	P3B
NH2	P33
OL1	REC
OL2	SCS
OPS	T88

Attachment 1 to RP 1201
Revised 12/04/87

Submitted by: R. Mendez

Sec. Chief Approval _____

Item No. Type Code Func. Area Date Entered

34688024-02 (Unit 1) UNR 04 10/12/88

1 (Unit 2)

Original Inspector Resp. Sec. Note

MENDEZ _____ _____

Responsible Inspector Closed Final Report

MENDEZ 1 _____

Interim Insp. Reports _____

Followup Date Remarks:

1 CONTAINMENT ISOLATION VALVE REPORTING REQUIREMENTS

WITH 10 CFR 20.73

Status Code _____

TYPE CODE				FUNCTIONAL AREA		SECTION	
AEO	-	ABNORM. ENVIR. OCC.	ORD	-	1. OPERATIONS	EPB	P1A
ALG	-	ALLEGATION	OTH	-	2. RAD - CHEM	FRP	P1B
BUL	-	BULLETIN	P20	-	3. MAINTENANCE	FLS	P2A
CAL	-	CONFIR. ACTION LTR.	P21	-	4. SURVEILLANCE	NOS	P2B
CIR	-	CIRCULAR	RJR	-	5. EMERGENCY PREP	NPS	P3A
DEV	-	DEVIATION	REC	-	6. SEC/SAFEGUARDS	NM1	P3B
GLR	-	GENERIC LETTER	RIP	-	7. OUTAGES	NM2	P3C
IAL	-	IMMEDIATE ACTION LETTER	SEP	-	8. TRAINING	OL1	REC
INF	-	INFORMATION NOTICE	SER	-	9. LICENSING	OL2	SCS
LER	-	LICENSEE EVENT REPORT	SGR	-	10. QUALITY ASSURANCE	OPB	TBB
NC	-	NON-COMPLIANCE (1-2-3-4-5)	SSF	-	11. OTHER		
NVS	-	NO VIOLATION 10 CFR 2, APP. C SEC. V.A	THI	-	12. FIRE PROT/N-K		
OPN	-	OPEN ITEM	UNR	-			
			WDN	-			
			---	-			

Submitted by: R. Mendez

Sec. Chief Approval _____

Item No.	Type Code	Func. Area	Date Entered
<u>3461 88024-03</u> (Unit 1)	<u>NC5</u>	<u>04</u>	<u>1 1</u>
<u>1</u> (Unit 2)			

Original Inspector	Resp. Sec.	Note
<u>MENDEZ</u>	<u>---</u>	<u>---</u>

Responsible Inspector	Closed	Final Report
<u>MENDEZ</u>	<u>1 1</u>	<u>---</u>

Interim Insp. Reports				
<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>

Followup Date	Remarks:
<u>1 1</u>	<u>FAILURE TO PERFORM AN AS FOUND LOCAL LEAK RATE TEST ON A CONFINEMENT ISOLATION VALVE</u>

Status Code	
<u>---</u>	<u>---</u>

TYPE CODE

AEO - ABNORM. ENVIR. OCC.	ORD - ORDERS TO LICENSEE
ALG - ALLEGATION	OTH - OTHER
BUL - BULLETIN	P20 - 10 CFR PART 20
CAL - CONFIR. ACTION LTR.	P21 - 10 CFR PART 21
CIR - CIRCULAR	R3R - REGION III REQUESTS
DEV - DEVIATION	REC - RECOMMENDATIONS
GLR - GENERIC LETTER	RIP - REGULATORY IMPROVEMENT PROGRAM
IAL - IMMEDIATE ACTION LETTER	SEP - SAFETY EVAL. PROGRAM
INF - INFORMATION NOTICE	SER - SAFETY EVAL. REPORT
LER - LICENSEE EVENT REPORT	SCR - 73.71 SAFEGUARDS REPORTS
NC - NON-COMPLIANCE (1-2-3-4-5)	SSF - SIGNIFICANT SAFETY FINDING
NVS - NO VIOLATION 10 CFR 2,	THI - THREE-MILE ISLAND ACTION ITEMS
APP. C SEC. V.A	UNR - UNRESOLVED ITEMS
OPN - OPEN ITEM	WON - WITHDRAWN

FUNCTIONAL AREA

1. OPERATIONS
2. RAD - CHEN
3. MAINTENANCE
4. SURVEILLANCE
5. EMERGENCY PREP
6. SEC/SAFEGUARDS
7. OUTAGES
8. TRAINING
9. LICENSING
10. QUALITY ASSURANCE
11. OTHER
12. FIRE PROT/H-K

SECTION

EPB	P1A
FRP	P1B
MLB	P2A
MOB	P2B
NPS	P3A
WM1	P3B
WQ2	P3C
OL1	REC
OL2	SCS
OPS	TSS

Attachment 1 to RP 1201
Revised 12/04/87

Submitted by: R. Mendez

Sec. Chief Approval _____

Item No.	Type Code	Func. Area	Date Entered
<u>346188024-04</u> (Unit 1)	<u>NC4</u>	<u>Q4</u>	<u>1-1-</u>
<u>1</u> (Unit 2)			

Original Inspector	Resp. Sec.	Note
<u>MENDEZ</u>	<u>---</u>	<u>---</u>

Responsible Inspector	Closed	Final Report
<u>MENDEZ</u>	<u>1-1-</u>	<u>---</u>

Interim Insp. Reports ---

Followup Date	Remarks:
<u>1-1-</u>	<u>FAILURE TO TAKE PROPER CORRECTIVE ACTION</u>

Status Code ---

TYPE CODE			
AEO -	ABNORM. ENVIR. OCC.	ORD -	ORDERS TO LICENSEE
ALG -	ALLEGATION	OTH -	OTHER
BUL -	BULLETIN	P20 -	10 CFR PART 20
CAL -	CONFIR. ACTION LTR.	P21 -	10 CFR PART 21
CIR -	CIRCULAR	R3R -	REGION III REQUESTS
DEV -	DEVIATION	REC -	RECOMMENDATIONS
GLR -	GENERIC LETTER	RIP -	REGULATORY IMPROVEMENT PROGRAM
IAL -	IMMEDIATE ACTION LETTER	SEP -	SAFETY EVAL. PROGRAM
INF -	INFORMATION NOTICE	SER -	SAFETY EVAL. REPORT
LER -	LICENSEE EVENT REPORT	SGR -	73.71 SAFEGUARDS REPORTS
NC -	NON-COMPLIANCE (1-2-3-4-5)	SSF -	SIGNIFICANT SAFETY FINDING
NVS -	NO VIOLATION 10 CFR 2, APP. C SEC. V.A	TMI -	THREE-MILE ISLAND ACTION ITEMS
OPN -	OPEN ITEM	UNR -	UNRESOLVED ITEMS
		WON -	WITHDRAWN

FUNCTIONAL AREA		SECTION	
1.	OPERATIONS	EPB	P1A
2.	RAD - CHEM	FRP	P1B
3.	MAINTENANCE	MLB	P2A
4.	SURVEILLANCE	NOS	P2B
5.	EMERGENCY PREP	NPS	P3A
6.	SEC/SAFEGUARDS	NM1	P3B
7.	OUTAGES	NM2	P3C
8.	TRAINING	OL1	REC
9.	LICENSING	OL2	SC3
10.	QUALITY ASSURANCE	OPS	T8B
11.	OTHER		
12.	FIRE PROT/H-K		

Attachment 1 to RP 1201
Revised 12/04/87