U.S. NUCLEAR REGULATORY COMMISSION

REGION III

Report No. 50-461/85060(DRS)

Docket No. 50-461 Licensee No. CPPR-137

Licensee: Illinois Power Company
500 South 27th Street
Decatur, IL 62525

Facility Name: Clinton Nuclear Power Station, Unit 1

Inspection At: Clinton Site, Clinton, IL

Inspection Conducted: November 11, 1985 through March 6, 1986

Inspector: S. M. Hare 4/7/86
Date

Approved By: M. P. Phillips, Chief
Operational Programs Section 4/7/86
Date

Inspection Summary

Inspection on November 11, 1985 through March 6, 1986 (Report No. 50-461/85060(DRS))
Areas Inspected: Routine announced inspection by one regional inspector of Containment Integrated Leak Rate Test (CILRT) and Local Leak Rate Test (LLRT) procedures review; CILRT performance witnessing; CILRT results review; LLRT performance witnessings; drywell bypass test results review; and post CILRT containment liner inspections. NRC inspection modules completed during this inspection are 70307, 70313, 70323, and 61720.
Results: Of the six areas inspected, no violations or deviations were identified in four areas. In the remaining areas, one violation was identified (failure to control activities that affect quality) in Paragraph 7.a, and one deviation was identified (failure to perform a 24-hour Type A test as committed to in the FSAR in Paragraph 2) in Paragraph 2.a.

DETAILS

1. Persons Contacted

Illinois Power Company

*W. C. Gerstner, Executive Vice President, Illinois Power
+*D. P. Hall, Vice President, Illinois Power
+*H. E. Daniels, Jr., Project Manager, Illinois Power
+*W. Connell, Quality Assurance Manager, Illinois Power
+#*D. C. Shelton, Nuclear Safety and Engineering Department Manager
+*J. H. Greene, Startup Manager, Illinois Power
+*J. Greenwood, Power Supply Manager (Soyland/WIPCo)
*S. B. Fisher, Nuclear Programs Manager
+*J. S. Perry, Nuclear Programs Manager, Illinois Power
+*J. G. Cook, Assistant Plant Manager, Illinois Power
#*D. L. Holesinger, Nuclear Safety Director, Illinois Power
*R. F. Shaller, Nuclear Training Director
+#*J. A. Brownell, Licensing Specialist
+J. E. Loomis, Construction Manager, Illinois Power
+D. J. Schlatka, Project Manager, Baldwin Associates
+J. V. Hawkins, Manager of Quality Assurance, Baldwin Associates
+J. L. Thompson, Manager of Quality Control, Baldwin Associates
+J. W. Wilson, Plant Manager, Illinois Power
#+F. A. Spangenburg, Manager, Licensing and Safety, Illinois Power
+H. R. Lane, Manager, Scheduling and Outage Management, Illinois Power
+N. C. Williams, Director, Support Services, Illinois Power
+W. P. Mullins, Chemistry Supervisor, Illinois Power
+W. F. Haun, C/S Supervisor NSED, Illinois Power
+D. W. Hillyer, Director, Radiation Protection, Illinois Power
+K. A. Baker, Supervisor, I & E Interface, Illinois Power
+R. Weber, Supervisor, Quality Systems, Illinois Power

U.S. NRC

+*T. P. Gwynn, Chief, Reactor Projects Section 1B
+C. J. Paperiello, Director, Division of Reactor Safety
#R. F. Warnick, Chief, Reactor Projects, Branch 1
+D. E. Keating, Senior Resident Inspector
#L. A. Reyes, Deputy Director, Division of Reactor Projects
#W. G. Guldemond, Chief, Reactor Projects, Branch 2

The inspector also contacted other personnel during this report period.

*Denotes those attending the exit interview on January 9, 1986.
+Denotes those attending the exit interview on February 28, 1986.
#Denotes those attending the exit interview in Region III on March 6, 1986

2. Preoperational Test Procedure Review

a. Containment Integrated Leak Rate Test (CILRT) Procedure

The inspector reviewed Preoperational Test Procedure PTP-IL/DW-01, Revision 0, entitled Integrated Leak Rate Test for conformance with

10 CFR Part 50, Appendix J; ANS N45.4-1972; Bechtel Topical Report BN-TOP-1, Revision 1; and ANSI/ANS 56.8-1981 requirements. The inspector's comments were discussed with the applicant prior to the issuance of Revision 1 to the procedure. With the exception of the below open items and deviation, the CILRT procedure was adequate for the preoperational CILRT.

During the performance of the Type A test, the inspector noted the CILRT procedure did not require the trending of sensors throughout the test as the testing methodology they were using (BN-TOP-1) required. The applicant trended the sensors, at the inspector's suggestion, throughout the test duration, as per requirements. This is considered an open item (461/85060-01(DRS)) pending the inspector's review of the procedure prior to the performance of the next Type A test.

Additionally, the inspector noted that after the successful Type A measured leakage phase of the test, test personnel following the procedure would have terminated the verification test at four hours, if the inspector had not informed them of the BN-TOP-1 requirement for running the verification test for half the duration of the Type A test (9.25 hours/2). The inclusion of this requirement into the procedure's acceptance criterion will be tracked as an open item (461/85060-02(DRS)).

During several of the discussions with the applicant pertaining to the inspector's CILRT procedure review, the inspector noted to the applicant that the procedure appeared to call for the use of a shortened test methodology (less than 24 hours), as described in Bechtel Topical Report BN-TOP-1. The inspector inquired where the applicant had committed to perform the BN-TOP-1 short duration test methodology; as generally, plants that use the BN-TOP-1 method for preoperational tests request specific permission from the office of Nuclear Reactor Regulation to do so. The applicant stated they had committed to perform this methodology in the CILRT procedure. While reviewing Clinton's Final Safety Analysis Report, the inspector noted that FSAR Chapter 6.2.6.1 states, in part, that Containment Integrated Leak Rate Tests (CILRT) will be performed in accordance with the requirements for Type A test outlined in ANS N45.4. Additional guidelines will be extracted from ANSI/ANS 56.8. ANS N45.4-1972 is endorsed by the NRC and is the standard referenced in 10 CFR Part 50, Appendix J for the express purpose of performing the CILRT or Type A test. Additionally, ANS N45.4 requires that Type A tests be of 24-hour duration. ANSI/ANS 56.8-1981 has not been endorsed by the NRC.

The performance of the preoperation CILRT of less than 24 hours using the Bechtel Topical Report, BN-TOP-1, is in direct conflict with the FSAR commitment to ANS N45.4 for a 24-hour test. Failure by the applicant to perform the Type A test in accordance with the FSAR is considered a deviation from a commitment (461/85060-03(DRS)).

In addition to matters discussed elsewhere in this report, the following requirements of Appendix J and Bechtel Topical Report, BN-TOP-1 were discussed in reference to Type A, B and C testing with the applicant to ensure a common understanding of the regulations:

(1) Whenever penetration configurations during a CILRT deviate from the ideal, the results of LLRTs for such penetrations must be added as a penalty to the CILRT results at the 95% confidence level. This penetration leakage penalty is determined using the "minimum pathway leakage" methodology. This methodology is defined as the minimum leakage value that can be quantified through a penetration leakage path (e.g., the smallest leakage of two valves in series). This assumes no single active failure of redundant leakage barriers. Additionally, any increase in containment sump, fuel pool, reactor water, or suppression pool level during the course of the CILRT must be taken as a penalty to the CILRT results. If penalties exist, they must be added (subtraction is never permitted) to the upper confidence level of the CILRT results.

(2) The Type A test length must be 24 hours or longer to use the mass point method of data reduction. If tests of less than 24 hours are planned, the Bechtel Topical Report, BN-TOP-1, must be followed in its entirety, including the trending of sensors, except for any section which conflicts with Appendix J requirements. For either methodology, the acceptance criterion is that the measured leakage at the 95% upper confidence limit must be less than 75% of the maximum allowable leak rate for the pressure at which the test was performed.

(3) For the supplemental test, the size of the superimposed leak rate must be between 0.75 and 1.25 times the maximum allowable leak rate La. The higher the value, the better. The supplemental test must be of sufficient duration to demonstrate the accuracy of the test. The NRC looks for the results to stabilize within the acceptance criteria, rather than the results being within the acceptance criteria. Whenever the BN-TOP-1 methodology is being used, the length of the supplemental test cannot be less than approximately one-half the length of the CILRT.

(4) An acceptable method for determining if the sum of Type B and C test exceeds the 0.60 La Appendix J limit is to utilize the "maximum pathway leakage" method. This methodology is defined as the maximum leakage valve that can be qualified through a penetration leakage path (e.g., the larger, not total, leakage of two valves in series). This assumes a single active failure to the better of two leakage barriers in series when performing Type B or C tests.

(5) Future periodic Type A, B, and C tests must include both as found and as left results. In order to perform Type B and C test repairs prior to a Type A test, an exemption from

Appendix J requirements should be obtained from NRR. The exemption should state how the licensee plans to determine the as found condition of the containment since local leak rate tests would be performed prior to the CILRT. An acceptable method is to commit to add any improvements in leakage rates which were the result of Repairs or Adjustments (RAs) using the "minimum pathway leakage" methodology.

(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 the applicant would have a consistent, technical basis for data rejection. One example of an acceptable method for data outliers is described 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.

b. Local Leak Rate Test Procedure(s) Review

The inspector reviewed preoperational test procedure XTP-00-07, Revision 1, entitled Local Leak Rate Tests, for Conformance with Regulatory Requirements and ANSI/ANS 56.8, which the applicant had committed to. The main body of the procedure appeared to be technically adequate and concise.

The appendices of the procedure which outlined specific tests on the different penetrations were examined on a sampling basis and as such, approximately 25% were reviewed. While the inspector noted a large number of exceptions and discrepancies, the appendices were generally well written and accurate.

One section of each appendix that was deleted in Revision 1 to the procedure was the isometric of each penetration. The inspector felt inclusion of the isometrics would be helpful for future local leak rate tests.

No violations or additional deviations were identified.

3. Preoperational Containment Integrated Leak Rate Test (CILRT) Witnessing

a. Instrumentation

The inspector reviewed the calibration data and verified that all of the instruments used in the test had been calibrated and that the correct weightings were placed into the computer program as required. The inspector noted the relatively good quality of the data, but also noted the small number of instruments in the containment, specifically the drywell. The inspector recommended the number of sensors in the drywell be, as a minimum, doubled for the first periodic Type A test to better monitor the heat loads in the drywell that were not present for the preoperational test. No sensors or data sets were rejected during the Type A test.

The following instrumentation was used during the test:

Type	Quantity
Resistance Temperature Detectors	22
Humidity Sensors	9
Pressure Manometers	2
Rotameters	2

b. Pretest Requirements

The inspector performed a pretest containment inspection, including the drywell, to ensure the proper placement of test instrumentation. Prior to this inspection, the applicant noted several humidity sensors that became saturated during containment depressurization from the Structural Integrity Test (SIT). The inspector witnessed the applicant's inspection of several of the sensors, along with the drying of one sensor with bottled nitrogen. Overall, the placement and number of test instrumentation was adequate for the preoperational CILRT due to the lack of heat loads.

The applicant had performed a containment liner inspection as required by Appendix J prior to the performance of the CILRT. The subsequent discovery of a hole in the containment liner 16 days after the performance of the CILRT puts the adequacy of the applicant's liner inspection in question. Details regarding the hole and the applicant's inspection are contained in Section 7.a of this report.

The inspector witnessed the pressurization of containment for the CILRT, and verified that additional procedural prerequisites had been satisfied as noted by the applicant's procedural sign-offs.

c. Valve Lineup Verification

To ensure that no fluid could enter the containment atmosphere and that penetrations were properly vented, the inspector independently verified that valve lineups for the following systems were correct:

System	Penetration(s)
Drywell Purge	1MC-102
Nuclear Boiler	1MC-151, 160
Control Rod Drive	1MC-63
Instrument Air	1MC-57, 58
Service Air	1MC-59
Containment Monitoring	1MC-150, 173, 153
Reactor Water Cleanup	1MC-60, 64, 61
Breathing Air	1MC-49
Fire Protection	1MC-82
Main Steam	1MC-5, 6, 7, 8
Residual Heat Removal	1MC-15
Reactor Core Isolation Cooling	1MC-28, 41
Fuel Pool Cooling and Cleanup	1MC-52, 53
Feedwater	1MC-9, 10

d. Test Witnessing

Upon completion of the SIT, the applicant kept the containment at a pressure that was 85% of the Type A test pressure for a duration of 24 hours as required by ANS/ANSI 56.8-1981. Subsequently, the applicant repressurized containment and was at test pressure at 5:45 p.m. on December 31, 1985. Upon the satisfactory completion of the required stabilization period, the applicant began the measured leakage phase of the test at 10:00 p.m. that evening. After the successful completion of the 9.25 hour short duration test, the applicant imposed a leak and began the verification portion of the test at 8:30 a.m. on January 1, 1986. The supplemental verification test was declared successful after five hours with acceptable agreement between the predicted and measured leakage rate.

No violations or deviations were identified.

4. CILRT Data Evaluation

a. Measured Phase Data Evaluation

The short duration CILRT was performed with data being collected and reduced by the applicant every 15 minutes. The inspector independently monitored and evaluated leak rate data using the Bechtel Topical Report, BN-TOP-1, Revision 1, total time formulas to verify the applicant's calculations of the leak rate. There was acceptable agreement between the results of the inspector and applicant as indicated by the following summary (units are in weight percent per day):

Measurement	Applicant	Inspector
Leakage rate calculated (Lam) during CILRT	0.224	0.239
Lam at upper 95% confidence level (does not reflect penalties - See Paragraph 4.c)	0.293	0.307

Appendix J Acceptance Criterion at 95% confidence level = 0.75 La = 0.75 (0.65) = 0.4875. As indicated above, the adjusted Lam at the 95% confidence level was within the Appendix J acceptance criterion.

b. Supplemental Test Data Evaluation

After satisfactory completion of the 9.25 hour test a known leakage (Lo) of 0.66 weight percent/day was induced. The inspector independently monitored and evaluated leak rate data to verify the applicant's calculation of the supplemental leak rate. There was acceptable agreement between leak rate calculations of the inspector and applicant as indicated in the following summary (units are in weight percent per day):

Measurement	Applicant	Inspector
Calculated leakage (Lc) rate during supplemental test	0.826	0.825

Lo = 13.3 SCFM = 0.66 wt %/day

Appendix J Acceptance Criterion: Lo-Lam-0.25La<Lc<Lo+0.25La (1.036<Lc<0.712). As indicated above, the supplemental test results satisfied the requirements of 10 CFR Part 50, Appendix J.

c. CILRT Valve Lineup Penalties

Due to valve configurations which deviated from the ideal penetration valve lineup requirements for the CILRT, the following penalties were required to use the minimum pathway leakage method:

Component/Penetration	Leakage Penalty (Weight Percent/Day)
Fire Protection	.0037
Containment Pressure	-0-
CILRT instrumentation	-0-
RHR Loop C	.0001
High Pressure Core Spray	.0001
Low Pressure Core Spray	.0011
Instrument Air	-*-
Post Accident Sampling	-*-
	.0050 Wt %/day

* - Local Leak Rate Testing had not been completed for these areas.

After taking these local penalties into account, the upper confidence value for containment leakage is equal to 0.298 weight percent/day, still well within the acceptable value of 0.4875. While all of the leakage penalties have not been calculated to date (denoted by *), it is not anticipated that these values will have a marked effect on the containment leakage rate. However, it is the applicant's responsibility to ensure the results of any local leak rate tests (LLRTs) that are performed between the CILRT and plant operation and the two remaining tests required above do not cause the containment to leak in excess of the allowable leak rate prior to the plant requiring containment integrity.

No violations or deviations were identified.

5. LLRT Witnessing

During the course of the inspection, the inspector witnessed the following LLRTs:

System	Penetration/Component
Main Steam	Outboard MSIV B, MSIV D*
Reactor Core Isolation Cooling	Pen. 1MC-42
Component Cooling Water	Pen. 1MC-47
Drywell Chilled Water	Pen. 1MC-109, 110
Upper Containment Air Lock	*
Containment Building HVAC	Pen. 1MC-113*
High Pressure Core Spray	Pen. 1MC-33, 37
Instrument Air	Pen. 1MC-206

*Inspector witnessed portions of corrective maintenance performed after original test failure.

In all cases, the inspector noted the LLRT procedures were adequate and followed; valve lineups were correct; leakage read was accurately recorded; and maintenance performed was in accordance with procedure.

No violations or deviations were identified.

6. Drywell Bypass Test Results Review

After the completion of the CILRT, the applicant performed the required Low Pressure Bypass Leakage Rate Test on the drywell structure. The test consisted of the pressurization of the drywell to above 3 psig and measuring the leak rate of the drywell structure. The inspector reviewed the results of this test to determine if the applicant met the Technical Specification (TS) limit of 3600 SCFM at the above test conditions. The resultant leakage rate measured by the applicant was approximately 275 SCFM, well below the TS allowable of 3600 SCFM.

No violations or deviations were identified.

7. Review of Work on Containment Liner

In previous discussions with the applicant, the inspector stated that after the performance of the SIT and CILRT, work on the containment liner should be controlled in such a manner as to not invalidate the SIT or CILRT results. To make a determination as to the adequacy of the applicant's control of work performed on the containment liner, the inspector looked at three different areas. The first area centered around the discovery of a hole in the containment liner. The second entailed a direct inspection of the containment liner to identify work performed on the liner since the CILRT. The third consisted of the quantification of the work on the liner and inside the containment.

a. Followup of Events Surrounding Discovery of a Hole in the Liner

On January 18, 1986, a hole through the liner of dimensions 7/8 x 1/2 inch was discovered by a Quality Assurance representative who was performing an inspection of a nearby area where a temporary attachment had recently been removed. The inspector questioned the applicant as to whether the hole had existed during the CILRT or had

been created afterward. The applicant stated that they had a foreman on the job who knew the hole had been there as long as he had been working at Clinton, specifically a period of two years. Upon hearing this, the inspector, in conjunction with Region III management, identified the following concerns:

(1) What effect did the hole have on containment integrity?

(2) Did the presence of the hole invalidate the CILRT results?

(3) Why the required CILRT pretest inspection did not identify the hole?

(4) Why had the hole remained undiscovered for a period in excess of two years?

Further investigation revealed the leakage through the hole appeared to be attenuated by the concrete portion of the containment structure, which had been poured using the containment liner as the inner form. As a result, the leakage through this hole, as apparently measured by the earlier CILRT, was less than the allowable leak rate (see Paragraph 4). A preliminary evaluation by the inspector as to what effect the hole would have on containment integrity revealed that if leakage through the hole was not attenuated, the hole would cause the containment to leak approximately an order of magnitude greater than the maximum allowable.

Several questions must be answered to determine if the hole, taken by itself, could have invalidated the preoperational CILRT results. They are:

(1) The liner, not concrete structure poured around the liner, is the containment leaktight barrier. Did the CILRT test pressure equalize (due to air leakage through the hole) across the liner, thus leak testing the concrete structure, not the liner?

(2) The applicant performed a 9.25 hour short duration CILRT instead of the normal 24 hour CILRT. Would a longer CILRT (i.e. 24 hour) have identified any additional leakage through the hole?

To determine if pressure equalized across the liner, the inspector questioned personnel in IP startup and reviewed test results. The inspector found that prior to the SIT, test personnel identified areas on the liner that when tapped, had a hollow sound, indicating that there were spaces between the liner and surrounding concrete structure. During the pressurization portion of the SIT, people entered the containment and tapped on the areas which had previously emitted a hollow sound. These areas no longer sounded hollow, indicating the pressure was pushing the steel against the concrete structure as designed. This means that pressure was felt on only

one side of the liner indicating that at these locations the pressure had not equalized across the liner due to the hole.

Due to the short duration CILRT, questions about the acceptability of the CILRT as it related to the hole being a potentially unrealized leak path were generated. The entire CILRT duration was approximately 20 hours; whereas, the duration of a normal CILRT would be approximately 33 hours (this would include stabilization and verification portions). This question does not appear to be a plausible one because the time at pressure for the SIT and CILRT was in excess of 33 hours. Further proof could have been obtained if the applicant had chosen to perform a diagnostic leak test on the hole. The applicant chose not to, citing the potential for liner degradation should the hole be pressurized to leak rate test pressure.

The fact that the applicant did not identify the hole during the required pre-CILRT liner inspection indicated that this inspection was not of sufficient depth. Interviews with applicant personnel indicated that approximately 74 man-hours of inspection time was put into inspection of the liner. The position taken at the time of this report by the applicant was that the time spent on the inspection was far in excess of what is normally spent on these inspections by other utilities, and the hole was not readily visible and could have easily been missed. The inspector noted the applicant's position, but disagreed with their position that the hole was difficult to see. During the portion of the inspector's inspection performed after the hole was discovered, the inspector noted the hole was readily visible with binoculars (an inspection tool the applicant had available) from two separate elevations.

Failure by the applicant to identify the hole in the liner during the required pre-CILRT general inspection is an example of a violation (461/85060-04.a(DRS)) of the 10 CFR Part 50, Appendix B, Criterion II requirement for control of activities affecting quality.

The hole remaining undiscovered for a period in excess of two years was of great concern to the inspector because it represented an undocumented/uncontrolled work activity that was never inspected. The fact that it was discovered by a planned Quality Assurance inspection of a nearby modification is fortuitous, in that if the modification had been in a different location, the plant may have began operation without ever discovering the hole. Failure by the applicant to identify the hole in the liner in a timely fashion is indicative of a breakdown in the applicant's Quality Assurance program and is a second example of a violation (461/85060-04.b(DRS)) of the 10 CFR 50, Appendix B, Criterion II requirement for control of activities affecting quality.

To date, the applicant has proceeded with the processing of the deviation report on the hole and the subsequent repair work required by the disposition of the deviation report. At the conclusion of the inspection, the applicant had prepared the area for welding.

b. Evaluation of Post CILRT Control of Work

To make a determination as to the adequacy of the applicant's control of work on the containment liner, the inspector performed a containment liner walkdown to find out how the work on the liner had been controlled since the CILRT.

The inspector, along with personnel provided by the applicant, walked down approximately 25% (11,000 ft^2) of the liner between elevations 737 and 856 and identified five areas where there were indentations or gouges in the liner which exceeded the maximum allowable depth specified in inspection documents. Additionally the inspector identified approximately 30 areas where work appeared to have recently (since the ILRT) been performed on the liner and requested the applicant provide documentation showing how the work had been controlled. Of these 30 requests for information, the applicant was able to provide documentation for all but six areas showing that either IP's Nuclear Station Engineering Department had concurred with the work prior to it being performed or that the work had been performed prior to the CILRT. IP had no firm position why the six areas had no paperwork, just conjecture that perhaps painters had cleaned the areas, removing the paint to base metal. To determine if the painters had done this, the inspector questioned a painter foreman who stated that when painters were repairing paint damage, they would cover the entire area, not just one distinct point. The undocumented areas were generally in out-of-the-way places and were only one of several in the area. These areas also had places with paint damage or deterioration closeby. In addition, the inspector noted that when painters prepared an area for painting, the area was generally square or rectangular. The areas in question were not typical of the way the painters worked. These observations gave credence to the inspector's position that these areas had not been worked on by the painters. These observations indicated that the applicant did not have sufficient controls to ensure that work inside containment did not adversely affect the containment liner.

Another area of concern to the inspector centered around the removal of attachments. Specifically, while interviewing the applicant's personnel, the inspector discovered that at least one temporary attachment had been removed by the craft using a cutting torch. This was contrary to the applicant's guidance on how to remove temporary attachments (grinding only) and was of particular concern to the inspector, because the hole in the containment resulted from the use of a cutting torch.

During the inspector's walkdown, the inspector noted the large workforce in the containment (200-300 people) approximately 20 of them welding and another 30-40 grinding inside the containment, although all of them were not working on the liner. The inspector also noted there was no access control to the containment, so the applicant could not control the number of people or the type of work they were performing inside the containment.

c. Review of Post CILRT Work in Containment

The inspector requested that the applicant identify how many modifications had been performed on the containment liner since the performance of the CILRT so the inspector could evaluate the level of effort on the liner.

The following is a summary of what the applicant provided:

- 397 work documents were generated for liner work/inspection
- 45 attachments were removed from the liner
- 32 attachments were added to the liner
- Five travelers were issued for safety-related work on the liner

As denoted above, a large number of hangers were removed and installed since the performance of the CILRT, which is indicative of a high level of construction effort. When the inspector requested the above information prior to the performance of the CILRT, the applicant supplied a status of Structural Travelers for the containment building which did not identify the above information.

In addition, the inspector requested the applicant supply a list of the work yet to be performed inside the containment structure. The punchlist they supplied identified approximately 850 punchlist items for work items remaining to be performed inside the containment. This indicated that there would continue to be a high level of construction effort inside the containment structure.

d. Summary

When taken by themselves, the information in the preceding three paragraphs may appear to be unrelated. Taken together, it is clear that since the performance of the CILRT, there had been a high level of effort expended on the containment liner. Also, there would continue to be a high level of effort in the containment structure for months to come. To date, the applicant appears to have had some control of the work performed on the containment liner. However, the control has not been sufficient to ensure that containment integrity is being maintained at a level to support the CILRT results as being representative of the containment's leakage.

The inspector reviewed the regulatory requirements contained in 10 CFR 50, Appendix J to determine if the activities performed since the CILRT did, in fact, impact on the acceptability of the CILRT as the "Preoperational CILRT." The applicable regulatory requirements out of Appendix J are as follows:

- Paragraph III in the preamble states, in part, that upon completion of construction of the primary reactor containment, and prior to any reactor operation period, a preoperational leakage rate test shall be conducted.

  Paragraph IV.A, states, in part, that any major modification performed after the preoperational leakage rate test, shall be followed by either a Type A, B or C test as applicable. As indicated in Paragraphs II.F, G and H, the only applicable test for a containment modification is a Type A test.

It is Region III's position that when Clinton performed their preoperational leakage rate test, the construction of containment was not complete, and that the only test that would ensure containment integrity following the numerous modifications made would be a Type A test. Therefore, due to the number of modifications performed on the containment liner and the apparent lack of access control, and sufficient work control in the containment, it appears that the above requirements of Appendix J have not yet been met.

This issue is under further review. Until this review is completed, this item will be tracked as an unresolved item (461/85060-05(DRS)) pending NRC resolution.

No additional violations or deviations were identified.

8. Open Items

Open items are matters which have been discussed with the licensee, which will be reviewed further by the inspector, and which involve some action on the part of the NRC or licensee or both. Open items disclosed during this inspection are discussed in Paragraph 2.a.

9. Unresolved Items

Unresolved items are matters about which more information is required in order to ascertain whether they are acceptable items, violations, or deviations. An unresolved item disclosed during the inspection is discussed in Paragraph 7.d.

10. Exit Interview

The inspector met with applicant representatives (denoted in Paragraph 1) on January 9, 1986, February 28, 1986, and at the conclusion of the inspection in the Region III office on March 6, 1986. The scope and findings of the inspection activities were summarized. The inspector discussed the likely informational content of the inspection report with regard to documents reviewed during the inspector by the inspector. The licensee did not identify any such documents as proprietary.