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U. S. Nuclear Regulatory Commission
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Subject: River Bend Station - Unit 1
Docket No. 50-458
License No. NPF-47
License Amendment Request (LAR) 95-05, Change to Technical Specification 3/4.6.1.3, "Primary Containment Leakage," and Application for Exemption from 10CFR50, Appendix J

File Nos.: G9.5, G9.42

RBEXEC-95-078
RBF1-95-0125
RBG-41524

Gentlemen:

In accordance with 10CFR50.12 and 10CFR50.90, Entergy Operations Inc. (EOI) hereby applies for an exemption from 10CFR50, Appendix J, "Primary Reactor Containment Leakage Testing For Water-Cooled Power Reactors," and amendment of Facility Operating License No. NPF-47, Appendix A - Technical Specifications, for River Bend Station (RBS). This submittal consists of a request for exemption from 10CFR50, Appendix J and a proposed change to Technical Specification 3/4.6.1.3, "Primary Containment Leakage," to allow Integrated Leak Rate Tests (ILRTs) or Type A tests to be performed at intervals as long as ten years based upon the demonstrated performance history of the containment structure. In the event of a ILRT failure, the frequency would be required to be increased to at least once per 48 months. If the subsequent ILRT meets the limit, the ten year schedule may be resumed.

The subject request is being submitted as part of the cost beneficial licensing action (CBLA) program established within NRR where increased priority is granted to licensee requests for changes requiring NRC staff review that involve high cost without a commensurate safety benefit. Although the proposed change does have safety benefit (e.g., occupational dose reduction due to reduced testing frequency in the order of 21 person rem per ILRT), its major benefit is economic. Approximately 2500 man-hours of effort are required to set-up, perform

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and evaluate the results of each ILRT. During plant outages involving Integrated Leak Rate Testing, performance of an ILRT requires approximately 72 hours of critical path time. Rental of the necessary air compressors and equipment necessary to conduct ILRTs cost approximately $100,000, alone. These costs exceed the threshold of $100,000 established under the CBLA program.

Attachment 2 provides a description of the proposed changes and the associated justification (including a Basis For No Significant Hazards Consideration). A marked-up and revised copy of the affected pages from the current Technical Specifications are provided in Attachment 3. Further, an affidavit supporting the facts set forth in this letter and its attachments is provided in Attachment 1.

EOI has reviewed the proposed change against the criteria of 10CFR51.22 for categorical exclusion from environmental impact considerations. The proposed change does not involve a significant hazards consideration or significantly increase individual or cumulative occupational radiation exposures. Based on the foregoing, EOI concludes that the proposed change meets the criteria given in 10CFR51.22(c)(9) for a categorical exclusion from the requirement for an Environmental Impact Statement.

Based upon the refueling outage safety improvement and significant resource savings that can be realized by implementation of this proposed change, EOI is requesting that this application be reviewed on a schedule sufficient to support the sixth refueling outage (RF-6) currently scheduled to begin January 6, 1996. As an alternate, if additional review time is required by the staff, EOI requests that ILRT performance be deferred from RF-6 and performed in RF-7 (presently scheduled for September 1997) and subject amendment remain open pending long-term resolution.

If you have any questions regarding this request or require additional information, please contact me or my staff.

Sincerely,

John R. McGaha

JRM/jcm
attachments

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Attn: Administrator

BEFORE THE

UNITED STATES NUCLEAR REGULATORY COMMISSION

LICENSE NO. NPF-47

DOCKET NO. 50-458

IN THE MATTER OF

GULF STATES UTILITIES COMPANY

CAJUN ELECTRIC POWER COOPERATIVE AND

ENTERGY OPERATIONS, INC.

AFFIRMATION

I, John R. McGaha, state that I am Vice President-Operations of Entergy Operations, Inc., at River Bend Station; that on behalf of Entergy Operations, Inc., I am authorized by Entergy Operations, Inc., to sign and file with the Nuclear Regulatory Commission, this change to the River Bend Station Physical Security Plan; that I signed this letter as Vice President-Operations at River Bend Station of Entergy Operations, Inc.; and that the statements made and the matters set forth therein are true and correct to the best of my knowledge, information, and belief.

John R McGaha

John R. McGaha

STATE OF LOUISIANA
PARISH OF WEST FELICIANA

SUBSCRIBED AND SWORN TO before me, a Notary Public, commissioned in the Parish of East Baton Rouge and qualified for the Parish above named, this 1st day of June, 1995.

(SEAL)

Jane Russell

Jane Russell
Notary Public

My commission expires with life

ENTERGY OPERATIONS, INC.
RIVER BEND STATION
DOCKET 50-458/LICENSE NO. NPF-47
LICENSE AMENDMENT REQUEST 95-05
(TS 3/4.6.1.3, "Primary Containment Leakage")

1.0 Introduction

In response to the NRC's cost beneficial licensing action (CBLA) initiative, River Bend Station (RBS) proposes to amend its approach to reactor containment Integrated Leak Rate Testing (ILRT) or Type A testing frequency as stated within 10CFR50, Appendix J.

This performance-based program is expected to return considerable dividends in safety, plant reliability and cost reduction (in excess of $11 million over the remaining licensed 30 year life of the facility).

1.1 Recent NRC Initiatives

Over the past several years, the NRC has devoted substantial resources to identification and analysis of the negative effects of regulation, culminating in a number of related initiatives such as the CBLA program, the Regulatory Review Group and the elimination of requirements marginal to safety program.

A common denominator in these efforts is the recognition that, in some cases, regulations are overly prescriptive resulting in the expenditure of unnecessary resources which could better be applied to more safety significant areas. The solution usually proposed for these cases is to convert the prescriptive requirements to performance-based requirements.

The Appendix J containment leakage testing requirements have received extensive regulatory scrutiny in this regard. The NRC has indicated its intent to pursue action on Appendix J (e.g., 57 FR 4166) and has published several possible approaches. For instance, to revise Appendix J to a performance-based regulation, the staff suggested the following (58 FR 6197):

> Limit revised rule to a new regulatory objective: In order to ensure the availability of the containment during postulated accidents, licensees should either: (a) test overall containment leakage no longer than every ten (10) years, or (b) provide an on-line monitoring capability of containment isolation status.

RBS believes that the former suggested approach or item (a) above, has considerable merit.

1.2 Proposed Leakage Testing Program

River Bend Station is requesting NRC approval of the necessary Technical Specification changes and Appendix J exemptions to implement a performance-based Type A (ILRT) containment leakage testing program. As suggested by the staff, the essential elements of the program would be Type A testing on a frequency not to exceed ten (10) years.

The proposed change affects only Type A containment and drywell inspection testing frequencies. Current test methods, test pressure , Type B and Type C test performance, acceptance and failure criteria, allowable leakage limits, etc., remain unchanged. Primary containment and drywell structural integrity inspections shall still be performed prior to actual Type A test performance.

The remainder of this document presents the details of the proposed change and the technical basis for same. In particular,

- Section two (2) provides a discussion of performance-based testing - its basis and applicability to the proposed change.

- Section three (3) discusses the proposed Type A testing program, the testing history at RBS, the basis for the program (including an assessment of its risk impact) and a discussion of the cost reduction achievable by the change.

- Section four (4) summarizes the basis for exemption to the applicable sections of 10CFR50, Appendix J.

- Section five (5) provides the basis for concluding that no significant hazards considerations exist for the proposed Technical Specification changes.

- Section six (6) presents the basis for a categorical exclusion from the requirement for an environmental impact statement.

2.0 Performance-Based Testing

2.1 Background

To further enhance safety, reliability and overall performance, the nuclear industry is frequently adopting more of a performance-based approach in planning and controlling plant operations.

The advantages of using performance as a determining factor, as opposed to more rigid prescriptive approaches, include the following.

- Problem Identification - Inherent with a performance-based program are quantifiable criteria which provide a direct indication of performance problems. All personnel have a visible and measurable means to assess performance.

- Integration - Performance-based programs allow explicit consideration of multiple factors affecting overall plant performance. Whereas prescriptive criteria tend to focus on a single aspect of performance, e.g. the safety function of a single component or system, performance-based programs may consider other equally important factors such as overall plant safety, personnel exposure, etc.

- Optimization - Often, there are tradeoffs to be considered in establishing requirements for systems and equipment. For example, testing is necessary to ensure operability of equipment but may also contribute to the unavailability of that equipment. Since there are many factors which contribute to variability among plants, it is difficult for prescriptive criteria to achieve an optimum level of performance for all plants. Performance- based criteria allow such optimization to occur.

- Resource Allocation - Use of performance-based criteria encourages the application of limited resources to real performance problem areas. Since such problem areas cannot necessarily be identified *a priori*, nor are such problem areas necessarily "generic" (i.e. applicable to all plants), prescriptive criteria may not adequately address real problems. Conversely, prescriptive criteria may place undue emphasis on areas where problems are not occurring and thus drain limited resources away from true problems.

- Flexibility - A performance-based testing program provides the flexibility to achieve the desired goal via alternative means. For example, system or component operability may be demonstrable through a number of tests. Rather than performing multiple tests on the same component to demonstrate compliance with multiple regulations, compliance may be demonstrated through alternative tests or programs performed for other reasons. A performance-based testing program inherently has the flexibility to take advantage of such situations.

Performance-based testing programs have basically four elements:

- Performance goals
- Performance factors

- Performance criteria
- Performance evaluation

Performance goals establish the bases for a performance-based testing program. Performance goals determine the level of functionality required of systems and equipment. The means to achieve this level of functionality can then be defined and the actual achievement measured and monitored.

Performance factors are those factors which affect either the achievement of the goal or perhaps the definition of the goal itself. They may include competing elements such that an optimized level of performance may be derived.

The performance criteria provide quantitative bases for the testing program. They include acceptance criteria for the test, as well as quantitative aspects of the testing program. Finally, the performance evaluation phase involves periodic feedback on performance to make sure that performance goals are, in fact, being met.

2.2 <u>Discussion</u>

The principal objective of the Appendix J Type A (ILRT) testing program is to ensure that reactor containment integrity can be maintained with high reliability following the design basis loss-of-coolant accident. In order to achieve this, the containment penetrations must limit leakage from containment, under pressure, to within specified limits. Type A tests shall continue to be conducted at full accident pressure (Pa) and not at a reduced test pressure (Pt).

The IPE found that containment isolation failure was not a significant containment failure mechanism and had a probability of occurrence (given an accident which challenges containment) of less than 3.3E-2. This probability was dominated by active failure of containment isolation valves to close on demand and human error to close the valves. The proposed change to the Appendix J Type A test program does not impact the probabilities for such demand failures. The conclusion of this qualitative risk assessment was that Type A tests do not significantly affect the frequency of accident sequences involving releases from containment.

Based on the IPE results, it is reasonable to set a general level of performance for the containment isolation function such that the IPE results remain valid. This implies that an acceptable level of performance for containment isolation is that leakage from the containment be less than specified limits with high reliability. This goal can be further defined by specifying the acceptable level of leakage from containment. At present, this is specified in the RBS Technical Specifications as 0.26 weight % of the containment air per day at a pressure of 7.6 psig. Although this degree of leakage is very low, no change to this allowable leakage rate is being proposed.

2.3 Conclusions

The proposed program change based on performance criteria is justifiable.

- The overall performance goal of ensuring containment isolation with a high degree of reliability can be demonstrated based on the continued acceptable performance of most containment penetrations.

- Qualitative performance factors are considered in establishing performance criteria. These factors consider past performance, component design, component service, safety impact and alternative testing programs.

- Quantitative acceptance criteria for testing continue to be set in a conservative manner.

- Quantitative criteria for testing intervals are based on demonstrated component performance and the achievement of the overall performance goal.

The program establishes a rational basis for containment testing consistent with preserving an adequate level of safety and the evolving practice of performance-based facility management.

3.0 Type A Testing - Proposed Change and Basis

3.1 Proposed Change

"Type A Tests" are defined in Appendix J Section II.F as ". . .tests intended to measure the primary reactor containment overall integrated leakage rate. . .".

Exemption is requested from the following paragraph in Section III.D.1 (a) for Type A test intervals:

> ". . .Type A tests shall be performed, at approximately equal intervals during each 10-year service period. The third test of each set shall be conducted when the plant is shutdown for the 10-year plant inservice inspections. . .".

Surveillance Requirement 4.6.1.3.a associated with Technical Specification 3/4.6.1.3 "Primary Containment Leakage" is being revised to reflect the 10 year reactor containment Integrated Leak Rate Test interval.

3.2 Proposed Type A Testing Program

In lieu of 10CFR50, Appendix J Section III.D.1 (a) as stated above, River Bend Station proposes to perform a Type A test once every ten years based upon the demonstrated performance history of the containment structure. In the event of a ILRT failure, the frequency would be required to be increased to at least once per 48 months. If the subsequent ILRT meets the limit, the ten year schedule may be resumed.

3.3 Type A Testing History

The testing history of RBS supports the proposed performance-based surveillance interval. Trends of previous test results indicate that the interval extension would not jeopardize the ability of containment to maintain the leakage rate at or below the required Type A limits.

The following is a history of RBS Type A testing:

- The preservice Type A test was conducted on April 4-7, 1985 for a period of 24 hours and was acceptable (approximately 57% of 0.75 L_a).

- The first periodic Type A test was conducted on May 27-29, 1989 for a period of 24 hours and was acceptable (approximately 57% of 0.75 L_a).

- The second periodic Type A test was conducted on August 14-15, 1992 for a period of 6 hours and was acceptable (approximately 87% of 0.75 L_a). This leakage rate, although acceptable, was higher than the two previous test results due to significant self-imposed Type B and C test penalties and corrections for water level changes as documented in the test procedure (14%). Typically, a short duration test (6 hours) will yield a higher leakage rate value than a full duration test (24 hours). This is a function of fewer data points being available for the statistical regression analysis in the final calculation. In this case, there were 75% fewer data points for a 6 hour test versus a 24 hour test. It should be noted that no sensors, data sets or data points were rejected for those calculations.

3.4 Basis for Proposed Change

Factors affecting leak-tightness of the containment may be categorized as 1) active components which are leak rate tested by Type B and C tests and 2) passive components which constitute the containment structure and are tested during the Type A test or ILRT.

1. Active Components

Industry experience indicates that the failures associated with Type A tests are generally found on Type B and C test penetrations. Therefore, continued overall leak tightness of the active containment components can be assured by a reliable Type B and C testing program which shall remain in affect.

2. Passive Structure

Two mechanisms could adversely affect the passive structural capability of containment. The first is deterioration of the structure due to pressure, temperature, radiation, chemical or other such effects. Secondly, modifications made to the structure which, if not carefully controlled, could leave the structure with reduced capability.

RBS has not experienced any negative affects from pressure, temperature, radiation, or chemistry to date and, based upon present operating data and controls, does not anticipate any concerns in the future. Disregarding actual accident conditions, structural deterioration is a gradual phenomenon which appears to require periods of time well in excess of the proposed 10 year ILRT interval. There does not appear to be any information developed in the industry which identifies relatively quick-acting degradation mechanisms which could adversely affect containment integrity. Other than accident conditions, the only pressure challenge to the containment structure is the ILRT itself. One of the discords of the current ILRT interval is the application of test pressure (based on accident analyses) which could potentially affect the passive containment structure over the long term. ILRT performance, based upon a 10 year interval, could therefore lessen the potential for adverse pressure effects.

10CFR50, Appendix J Section V.A. requires a general inspection of the accessible interior and exterior surfaces of the containment structure and components to be performed prior to any Type A Test to uncover any evidence of structural deterioration which may affect either the containment structural integrity or leak tightness. At RBS, there has been no evidence of structural deterioration or abnormalities that would impact structural integrity or leak tightness.

Surveillance Test Procedures STP-057-3700, "Containment Structural Integrity Verification/Report," and STP-057-3701, "Drywell Structural Integrity Verification/Report," are performed to meet Technical Specifications 4.6.1.6 and 4.6.2.4.1, respectively. These procedures are performed prior to the ILRT.

The performance history of these tests is as follows:

- Pre-service tests performed April, 1985

- First periodic tests performed May, 1989
- Second periodic tests performed August, 1992

RBS has reviewed the results of these tests. The results were found to be satisfactory with no obvious defects or abnormalities detected. The third periodic tests are scheduled for January, 1996.

Modifications made to the containment must continue to at least meet the original construction requirements. In fact, modifications which may alter the passive containment structure are infrequent. By their nature, such modification will receive extensive scrutiny to ensure containment capabilities are not compromised. The RBS design change, 50.59 and similar programs have demonstrated effective in providing high quality oversight of such safety significant modifications. In addition, 10CFR50, Appendix J Section IV.A requires Type A testing to be performed following any major modifications to the primary containment structure boundary. This requirement shall also remain in affect.

The extended Type A testing interval is therefore justified based upon:

- Reliability of the passive containment structure

- Maintaining containment boundary modification testing requirements in accordance with Appendix J, Section IV.A

- The continued ability of the Type B and C testing program to detect primary sources of containment leakage that cause Type A test failures

3.5 <u>Safety Evaluation</u>

The function of the Appendix J-Type A test is to ensure that the integrated leakage from the containment is within acceptable limits. One effect of the proposed change is to potentially increase the probability that containment leakage will occur and go undetected between tests. Such leakage may be the result of leakage through containment penetrations, through airlocks or through containment structural faults. Appendix J-Type B and C tests are effective in detecting leakage through containment penetrations. Airlocks are tested with much greater frequency than the Type A test frequency such that the proposed change in Type A testing does not impact airlock performance. This section addresses only the risk impact of changes in the Type A test due to postulated leakage which is not detectable by other parts of the Appendix J test program.

The risk impact of containment structural leakage is to create a release pathway for radionuclides in the event that the containment is challenged, such as in a LOCA or severe accident. Such

leakage does not create any new accident scenarios nor does it contribute to the initiation of any accident. The proposed changes may affect 1) the probability for containment leakage or failure following an accident and/or 2) the consequences of such accidents. The RBS IPE examined containment response during severe accidents and provides estimates of consequences. The IPE is used as the basis for estimating the impact of changes to the Appendix J Type A test program.

The containment structure is passive. Under normal conditions, there is no significant environmental or operational stress that could contribute to its degradation. Passive failures resulting in significant containment structural leakage are, therefore, extremely unlikely to develop between Type A tests. No such failures have ever occurred at RBS.

The post-accident environment within containment may be severe and could contribute to failure of its function. Such environments were considered as part of the IPE. The IPE found, however, that postulated containment failure under severe accident conditions is due to phenomenological effects associated with severe accidents. None of the identified containment failure mechanisms for severe accidents would be impacted by the proposed changes in the Appendix J-Type A test program.

The IPE found that containment isolation failure was not a significant containment failure mechanism and had a probability of occurrence (given an accident which challenges containment) of less than 3.3E-2. This probability was dominated by active failure of containment isolation valves to close on demand and human error to close the valves. The proposed change to the Appendix J-Test A test program does not impact the probabilities for such demand failures. The conclusion of this qualitative risk assessment is that Type A tests do not significantly affect the frequency of accident sequences involving releases from containment.

This is due to the following:

- Other testing programs will effectively detect containment leakage caused by degradation of containment penetrations.
- Passive failure of the containment structure itself is extremely unlikely.
- Events challenging containment have calculated frequencies of occurrence which are very low.
- Containment failure mechanisms which are dominant in the IPE are associated with severe accident phenomena which are not affected by the proposed change in the Appendix J-Type A test program.

- The Containment isolation failure probability is dominated by active component failures and human errors which are not affected by the proposed change in Appendix J-Type A test program. Notwithstanding, containment isolation is not found to be a significant failure mechanism in the RBS IPE.

3.6 Cost Reduction Assessment

Type A tests or ILRTs are unquestionably one of the most costly surveillances performed by a utility. Not only because of manpower, software/hardware, instrumentation, pressurization and associated support equipment, contract personnel, etc., but most importantly, because of the direct impact that prerequisite setup and actual test performance have on critical path time. Typically, ILRTs require a minimum of 72 hours of critical path time. The primary reason for this impact on critical path is the fact that the entire Nuclear Island and periphery become an exclusion area with respect to personnel access from the time the ILRT valve line-up is performed until achievement of atmospheric pressure following depressurization. Consequently, if the down time could be reduced by decreasing ILRT frequency without compromising public health and safety, the cost savings realized would be quite substantial. ILRTs require an estimated 2,500 man-hours, minimum, for each test performance or the equivalent of $150,000. Rental of the necessary air compressors and associated equipment alone cost approximately $100,000. Critical path time equates to a minimum of 3 days or 72 hours resulting in replacement power costs of $1,296,000 ($432,000 per day). This represents a total cost for performance of one (1) ILRT of approximately $1,900,000. When considering the remaining 30 year licensed life of the plant, this would equate to a cost savings in excess of $11,000,000 based upon a ten (10) year ILRT performance frequency. Additional information concerning ILRT costs is provided in Attachment 4.

4.0 Basis for Exemption

EOI has evaluated the proposed change against the criteria for specific exemptions as described in 10CFR50.12.

The assessments of the proposed change confirm that the associated method is appropriate and provides a technically sound means for accomplishing the regulatory purpose of the rule. No undue risk will result form deviating from the interval specified in Appendix J. In fact, the better utilization of scarce resources will allow more effective implementation of an overall safety policy and an improved maintenance plan and is consistent with the NRC's policy of efficient and effective nuclear safety regulation.

EOI believes that the proposed change is not in violation of any applicable law, will not present an undue risk to the public health and safety and would be consistent with the common defense and security.

In addition to meeting the general standards of 10CFR50.12(a)(1), the proposed change meets the criteria for special circumstances as described in 10CFR50.12(a)(2)(ii),(iii),(iv), and (vi):

10CFR50.12(a)(2)(ii)

The interval requirements specified in Appendix J are not necessary to achieve the underlying purpose of the rule. The stated purpose of containment leakage rate testing is:

> ". . . to assure that leakage through the primary reactor containment and systems and components penetrating primary containment shall not exceed allowable leakage rate values as specified in the technical specifications or associated bases. . . "

The proposed change provides an alternative to achieve the underlying purpose of the regulation. The programmatical controls associated with the proposed RBS performance-based Type A leakage testing program provides protection equivalent to the prescriptive requirements of Appendix J while allowing for significant reductions in cost and corresponding increases in efficiency. The negligible change in risk provides equivalent assurance that allowable leakage rate will not be exceeded.

10CFR50.12(a)(2)(iii)

EOI believes that the additional costs associated with literal compliance are not necessary to assure adequate safety protection and therefore represents an undue hardship. In fact, over the long run, literal compliance detracts from safety by focusing scarce resources on relatively low risk areas of the plant.

10CFR50.12(a)(2)(iv)

The proposed exemption would ultimately result in benefit to the public health and safety. The change in safety is negligible and essentially neutral as stated earlier. Resources now being expended on meeting the present requirements of Appendix J could be better utilized. At least part of the savings resulting from this exemption will be reinvested to improve safety, improve maintenance and other more appropriate areas. Therefore, this change will result in an improvement in overall safety and maintenance and effectively result in a reduction in risk to the public. EOI has a demonstrated commitment to safety and will continue to commit resources as necessary to fulfill that commitment.

10CFR50.12(a)(2)(vi)

Plant specific probabilistic risk assessments (PRAs) were not available and were therefore not considered when the regulation requiring compliance with Appendix J was adopted. Probabilistic risk assessments, beginning with the Reactor Safety Study, WASH-1400 (NRC 1975), have consistently shown that containment leakage is a relatively minor contributor to overall plant risk. The dominant containment-related contributions to risk stem from accidents in which the containment ruptures (due to steam explosions, overpressure, hydrogen combustion, etc.) or the containment isolation function fails or is bypassed (e.g., an interfacing systems LOCA with resulting direct release outside containment). In these dominant scenarios, containment leakage plays no significant role. Post - TMI Severe Accident Research indicted that ultimate containment strength is more important than ultimate containment leak tightness. Consequently, the probability of containment failure is not affected by ILRT frequency. The cost of containment leakage rate testing is demonstrably high. Not only can regulatory burden be reduced substantially, but occupational dose can be reduced without any significant impact on safety.

5.0 No Significant Hazard Considerations

Entergy Operations Inc. (EOI) proposes to change the current River Bend Station (RBS) Technical Specifications to allow the time interval for performance of the reactor containment Integrated Leak Rate Test to be increased to at least once per ten (10) years. The testing would be performed more frequently if containment integrity degrades. In accordance with 10CFR50.92, a proposed change to the operating license (Technical Specifications) involves no significant hazards consideration if operation of the facility in accordance with the proposed change would not (1) involve a significant increase in the probability or consequences of any accident previously evaluated, (2) create the possibility of a new or different kind of accident from previously evaluated, or (3) involve a significant reduction in a margin of safety. This request is evaluated against each of these criteria as follows:

(1) The proposed change does not involve a change to the plant design or operation. As a result, the proposed change does not affect any of the parameters or conditions that contribute to initiation of any accidents previously evaluated. Thus, the proposed change cannot increase the probability of any accident previously evaluated.
The proposed change potentially affects the leak tight integrity of the containment structure designed to mitigate the consequences of a loss of coolant accident (LOCA). The function of the containment is to maintain functional integrity during and following the peak transient pressures and temperatures which result from any loss-of coolant accident (LOCA). The containment is designed to limit fission product leakage following the design basis LOCA and analyses demonstrate that these offsite doses are less than

those allowed under 10CFR100 design limits of 15 psig and 185°F. Because the proposed change does not alter the plant design, only the frequency of measuring containment leakage, the proposed change does not directly result in an increase in containment leakage. However, decreasing the test frequency can increase the probability that a large increase in containment leakage could go undetected for an extended period of time. These leakage paths include potential cracks in the containment structure and various penetrations through the containment structure. Based upon the results of the structural integrity test conducted as part of the preoperational or preservice test program and the periodic containment and drywell structural integrity surveillance tests (see Attachment 5), additional cracking of the containment is not expected during the remaining life of the plant. Ventilation and piping penetrations are designed with two isolation valves in series with one valve in the drywell and another either outside primary containment or in the wetwell. High energy lines that extend into the wetwell, such as the Main Steam and Feedwater lines, are encapsulated by guard pipes to direct energy to the drywell in case of a piping rupture.

Electrical penetrations are sealed with a high strength/density material that will prevent leakage as well as provide radiation shielding. The TS ILRT acceptance criterion of 0.75 La provides margin for degradation. Containment performance data to date suggests that containment degradation, even during a ten (10) year interval between tests, will not exceed this margin.

Based on the above, EOI has concluded that the proposed change will not result in a significant increase in the probability or consequences of any accident previously evaluated.

(2) The proposed change does not involve a change to the plant design or operation. As a result, the proposed change does not affect any of the parameters or conditions that could contribute to initiation of any accidents. This change involves the reduction in the Integrated Leak Rate Test frequency. The method of performing the test is not changed. No new accident modes are created by extending the testing intervals. No safety-related equipment or safety functions are altered as a result of this change. Extending the test frequency has no influence on, nor does it contribute to, the possibility of a new or different kind of accident or malfunction from those previously analyzed.
Based upon the above, EOI has concluded that the proposed change will not create the possibility or a new or different kind of accident previously evaluated.

(3) The proposed change only affects the frequency of measuring containment leakage and does not change the leakage rate limit. However, the proposed change can increase the probability that a large increase in containment leakage could go undetected for an

extended period of time. Operational experience has shown that the leak tightness of the containment has been maintained significantly below the allowable leakage limit. In fact, an analysis was conducted to determine the potential risk to the public from the proposed change. Based on this analysis, under several different accident scenarios, the risk of radioactivity release from containment was found to be negligible.

The margin of safety that has the potential of being impacted by the proposed change involves the offsite dose consequences of postulated accidents which are directly related to containment leakage rate. The containment isolation system is designed to limit leakage to L_a which is defined by the RBS Technical Specifications to be 0.26 percent by weight of the containment air per 24 hours at 7.6 psig (P_a). The limitation on containment leakage rate is designed to ensure that total leakage volume will not exceed the value assumed in the accident analyses at the peak accident pressure (P_a) or 7.6 psig.

To provide additional conservatism, the measured overall integrated leakage rate is further limited to less than or equal to 0.75 L_a during performance of the periodic Integrated Leak Rate Test and to less than or equal to 0.60 L_a (total combined leakage) for Type B and C leak rate tests. This is done to account for the possible degradation of the containment leakage barriers between tests. These acceptance criteria ensure that an acceptable margin of safety is being maintained and will not be altered by the proposed change. The preservation of this margin will continue to provide for potential degradation of the leakage barriers between tests. RBS presently has on docket with the staff a submittal (reference RBG-41133, Rev. 1 to LAR 93-14 dated January 18, 1995) that allows the acceptance criteria, between required leakage rate tests, to be ≤ 1.0 La since at ≤ 1.0 La, the offsite dose consequences are bounded by the assumptions of safety analysis.

No change in the method of testing is being proposed. The Type A test will continue to be done at full pressure (P_a) or greater. Primary containment penetrations which require Type B or C leak rate tests will be performed in the same manner as before. Other programs are in place to ensure that proper maintenance and repairs are performed during the service life of the primary containment and systems and components penetrating the primary containment.

No change in the RBS allowable leakage rate is being proposed. These conservative leakage rates ensure that the containment leakage remains low.
As a result, EOI has concluded that the proposed change will not result in a significant reduction in the margin of safety.

Based on the foregoing, EOI concludes that this request does not involve a significant hazards consideration.

6.0 Environmental Impact Consideration

RBS has reviewed this request against the criteria of 10CFR51.22 for environmental considerations. This regulation allows for a categorical exclusion provided that (i) the amendment involves no significant hazards consideration, (ii) there is no significant change in the amounts of any effluents that may be released offsite, and (iii) there is no significant increase in individual or cumulative occupational radiation exposure.

As previously discussed, the request is for a change in Type A testing frequency only. This request has been determined by RBS not to involve a significant hazards consideration. The change will continue to allow for timely and accurate determination of the radiological plant effluents and will not affect the amounts or types of effluents since this change only concerns testing frequency. The requested change would reduce the testing frequency only and, consequently, would not increase the individual or cumulative occupational radiation exposure. RBS concludes that the propose change meets the criteria given in 10CFR51.22 (c)(9) for a categorical exclusion from the requirement for an environmental impact statement.

7.0 Schedule for Attaining Compliance

Based upon the refueling outage safety improvement and significant resource savings that can be realized by implementing this proposed change, EOI is requesting that this application be reviewed on a schedule sufficient to support the sixth refueling outage (RF-6) currently scheduled to begin January 6, 1996. As an alternative, if additional review time is required by the staff, EOI requests that ILRT performance be deferred from RF-6 to RF-7 (presently scheduled for September 1997) and the subject amendment request remain open pending long-term resolution.

8.0 Notification of State Personnel

A copy of this amendment request has been provided to the State of Louisiana, Department of Environmental Quality - Radiation Protection Division.