



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

November 16, 1995

Mr. Robert E Denton
Vice President
Nuclear Energy Division
Baltimore Gas and Electric Company
1650 Calvert Cliffs Parkway
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SUBJECT: REQUEST FOR ADDITIONAL INFORMATION (RAI) CONCERNING THE
BALTIMORE GAS & ELECTRIC COMPANY REPORT ENTITLED, "INTEGRATED
PLANT ASSESSMENT METHODOLOGY," DATED AUGUST 18, 1995,
(TAC NOS. M93326 & M93327)

Dear Mr. Denton:

By letter dated August 18, 1995, Baltimore Gas & Electric (BGE) submitted the report, "Integrated Plant Assessment Methodology," (Attachment 1 to the August 18 letter), describing the specific methodology to comply with 10 CFR Part 54, Sections 54.21(a)(1),(2),(3) and 54.21(c). The August 18 submittal also included a sample application and integrated plant assessment (IPA) for a select set of systems as well as a sample updated final safety analysis report supplement (Attachment 2 to the August 18 letter). By letter dated November 8, 1995, BGE requested NRC review and approval of Attachment 1 to the August 18 letter as an acceptable method for meeting the requirements of 10 CFR Part 54 and requested comments on the level of detail and format of their Attachment 2.

Upon initial review of the report, the Nuclear Regulatory Commission staff has identified issues for which additional information is required (Enclosure 1). Enclosure 1 represents the issues resulting from the review of the IPA methodology. The staff has provided another list of comments (Enclosure 2) containing level of detail, technical, and other comments on the information contained in Attachment 2. The comments in Enclosure 2 are provided as information regarding what level of detail the staff expects to see regarding implementation of the methodology; however, the IPA methodology should incorporate these comments to the extent appropriate. Also, these comments may prove helpful in your planning for future topical reports regarding aging management reviews. As requested, the staff is not reviewing the acceptability of any specific aging management programs. Please contact me in the near future to discuss your schedule for responding to these comments or if you have any questions.

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Mr. Robert E. Denton

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November 16, 1995

This requirement affects less than ten (10) respondents, and therefore, is not subject to Office of Management and Budget review under Public Law 96-511.

Sincerely,

Original signed by

John P. Moulton, Project Manager
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Division of Reactor Program Management
Office of Nuclear Reactor Regulation

Docket Nos.: 50-317,
50-318

Enclosures: As stated

cc: See next page

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REQUEST FOR ADDITIONAL INFORMATION ON THE BG&E IPA METHODOLOGY

1. General: Clarify what parts of the previous IPA submittal are relied on in this IPA methodology or are the same in this methodology? Also, clarify how and where in this methodology BG&E addresses the open and confirmatory items from the previous DSER if it is relied on.
2. General: Documentation: The methodology makes reference to the need to document the results of the analysis or screening steps. However, the degree of documentation or elements of documentation that will be prepared are not discussed in any substantive form. Provide additional detail on how the results will be documented.
3. General: Operating Experience/Generic Communication/Industry Topical Reports: The methodology mentions the importance of operating experience yet it does not demonstrate how and where consideration of such operating experience is to occur. Such operating experience may be relevant in the identification of aging effects that should be managed and the identification of non-safety systems that can impact a safety system. Provide additional information as to when and how operating experience is considered in the IPA. Further, explain how existing programs resulting from responses to NRC generic communications would be factored into the IPA.

Additionally, the report indicates that industry documents are reviewed for potential ARDMs. Sampling information in Appendix A found that BG&E has referenced the Nuclear Management and Resources Council (NUMARC) industry report on the pressurized water reactor (PWR) vessel internals for renewal in the second example, "Reactor Coolant System." However, BG&E did not reference the NUMARC industry report on the PWR containment in the first example, "Containment."

The information on page 4-2 (Section 4.3 of Appendix A) is referenced from the NUMARC industry report on the internals. However, sampling the potential ARDMs discussed, the staff found several unresolved items from the staff review of the subject industry report that are identified as not significant in the BG&E example, such as stress corrosion cracking and creep (core shroud assembly).

The information on page 3-1 through 3-5 (Section 3.1 of Appendix A) is not referenced from the NUMARC industry report on the containment. However, sampling the potential ARDMs discussed, the staff found differences in information between the BG&E report and the NUMARC report, such as aggressive chemical attack on concrete and inaccessible areas. These differences should be discussed.

Discuss the use of industry documents such as the NUMARC industry reports for renewal. Also, discuss how BG&E assesses whether it is within the bounds of these reports.

4. General: The phrase "maintain the pressure boundary" is used repeatedly. What is the criteria used to determine when the pressure boundary is not maintained. Is there a difference between maintaining pressure boundary integrity and maintaining pressure boundary?
5. Page 7. For the definition of "passive" replace "does not require motion" with "is performed without moving parts."
6. Page 12, Section 2.3.4 states that "techniques provide an equivalent level of assurance." What is the purpose in assuring that all techniques provide equivalent assurance. How does this assure that the evaluation techniques are to provide the necessary evidence that the findings of 54.29 can be supported?
7. Page 19, Section 3.3.1.1 states, "By relying on the Q-List Accident Shutdown Flow Sheets and Vital Auxiliaries Flow Sheets, SR SSs are identified, as well as all SSs that could fail and prevent the functioning of SR SSCs. This identification is not limited to first level, second level or any specific level of support equipment. Rather, the scoping is performed consistent with the CCNPP Q-List Design Standard which was developed with the intent of identifying and controlling a similar scope of SSCs to that defined by the first two criteria of 54.4." This statement indicates that the Vital Auxiliaries Flow Sheets in the Q-List have identified all non-safety related SSCs whose failure could prevent satisfactory accomplishment of any of the functions identified in 54.4(a)(1).

The Open Item in the DSER questioned how the previous methodology would identify a non-safety-related SSC that provides supporting functions to another non-safety-related SSC that is required for a safety-related SSC to perform its function. Provide a discussion or an example from the Vital Auxiliaries Flow Sheets in the Q-List to show that a non-safety-related SSC that provides supporting functions to another non-safety-related SSC that is required for a safety-related SSC to perform its function would be identified as within the scope of license renewal.

8. Page 20, Section 3.3.2 states, "These evaluations are reviewed to identify SSs that are relied on to mitigate the subject plant event as well as any systems or structures whose failure would result in failure of other equipment to mitigate the particular event." Provide a discussion or an example to show that a non-safety-related system or structure that provides supporting functions to another non-safety-related system or structure that is relied on to meet the regulated events in 54.4(a)(3) would be identified as within the scope of license renewal.
9. Page 31, Section 4.1.1 discusses system intended functions. However, it does not contain details of the CLB design loading conditions under which the system is required to function. A system may be required to have structural integrity under normal, upset, emergency, and faulted conditions in accordance with the CLB. For example, a system may be required to withstand a seismic event while another system, such as the

fire protection shutdown system installed to ensure post-fire shutdown capability (Paragraph II.L.6 of Appendix R), may not be required to withstand a seismic event. The difference in the intended function based on the design conditions between these two systems could affect the aging management program for renewal. Thus, the CLB design loading conditions should be identified and subsequently transferred to the structure and component intended functions for consideration in developing aging management programs, as appropriate.

10. Page 31, Section 4.1.1 discusses system intended functions. It should include a discussion relating to redundancy, diversity, and defense-in-depth. Where the plant's licensing basis includes requirements for redundancy, diversity, and defense-in-depth, the system intended functions include providing for the same redundancy, diversity, and defense-in-depth during the period of extended operation. For example, a system with two independent trains, according to the plant's CLB, has to perform the intended functions by each independent train.
11. Page 31, Section 4.1.1 pressure boundary function should include:
 - (1) structural integrity under CLB design loading conditions, and
 - (2) General Design Criterion 19, "Control Room," in addition to Part 100 when discussing adequate radiation protection.
12. Page 39, Section 4.3 shows the commodity groups. Are cable trays considered part of a specified commodity group?
13. Page 42, Sections 5.1.1 and 5.1.2, replace the word "motion" with "moving parts".
14. Page 43, Section 5.2, Determination of Long-lived: Replacement on performance or condition.

The rule does not allow structures and components to be determined to be short-lived (not long-lived) based on a condition monitoring program. The portion of the SOC that is referenced on page 43 is intended to clarify the agency's position that structures and components are considered long-lived if they are subject to a condition monitoring program (and not subject to a replacement based on a qualified life or specified time period) and that these structures and components are subject to an aging management review. Additionally, the SOC indicates that an applicant can use replacement programs based on performance or condition that provides reasonable assurance that the functionality of that structure or component will be maintained. This section needs to be revised to be in compliance with the rule or a discussion needs to be provided as to how this would satisfy the requirements of the rule.

Additionally, it is not clear what site documentation will be available that justifies that the three criteria of Table 5-1 are met. Provide additional information explaining the site documentation that will exist for these determinations and the level of detail in this documentation.

15. Page 50, Section 6.1.1 indicates that the pressure-retaining components in the diesel generator supporting equipment would be managed by the diesel generator performance and condition monitoring program. The staff does not believe that the performance and condition monitoring program ensures the structural integrity of these pressure-retaining components under CLB design loading conditions during the period of extended operation. Provide additional discussion to demonstrate how structural integrity under design loads is addressed by the performance and condition monitoring program.
16. Page 50, Section 6.1.1. In addition to the diesel generator supporting equipment, what other complex assemblies whose only passive function is closely linked to active performance have been identified?
17. Page 51, Section 6.1.1, Criteria for use of performance and condition monitoring of complex assemblies as adequate aging management for passive function.

One of the criteria is that the "complex assembly" be covered by the maintenance rule. Provide specific examples that demonstrate the use of this criterion. Include the technical basis for how the passive functions of that "complex assembly" would be preserved by existing maintenance rule programs.

18. Page 51, Section 6.1.2 discusses component assemblies subject to refurbishment. It is not clear how the proposed approach addresses the pressure boundary function. For example, page 52 states, "The assembly components and subcomponents are inspected for signs of aging and other degraded conditions." Words like "including the pressure-retaining boundary" should be inserted after the word "subcomponents" in this statement to indicate that the inspection includes looking for degradation in the pressure-retaining boundary. In addition, page 52 states, "The component assembly's intended functions are tested after the refurbishment." Clarify this statement because the intended functions are to be performed under CLB design loading conditions which may be difficult to simulate in a test.
19. Page 52, Section 6.1.3, Long-Lived EQ components

This section states that components having an EQ life of greater than 40 years are adequately managed by the EQ program. This is not an acceptable argument. Provide the rationale to be used to demonstrate further qualification of these components for the extended period of operation. For example, how will the qualification of cables for the additional period of service life be demonstrated?

Additionally, this section states that the EQ program requires that the component be reanalyzed to extend the qualified life. The NRC will generally not accept analysis in lieu of testing to determine the qualified life of components. Any one of the four methods in 50.49(f) is acceptable to extend the qualified life of a component.

20. Page 55, Section 6.2.3 indicates that the rationale for designating whether each ARDM is applicable or not is maintained onsite. This assessment is part of the aging review and should be discussed as part of the renewal application to demonstrate how the requirements of 54.21(a)(3) are being met.
21. Page 55, Section 6.3.1 states, "The first phase of a maintenance strategy is identification that detrimental effects of aging are or could be occurring." Tie the discussion on "Discovery" to the structure and component intended functions under CLB design loading conditions. For example, a phrase like "affecting the structure and component intended functions under CLB design loading conditions" could be inserted after the word "aging" in the above statement. The remainder of the text should also be revised accordingly, such as Sections 6.3.2 and 6.3.3. This would avoid relying on inspections that would not discover aging effects before a loss of intended function under a CLB design load.
22. Page 55, Section 6.3.1 discusses "Discovery." Does the methodology call for the specific frequency of the associated activities, such as inspections, to be described in the renewal application?
23. Page 55, Section 6.3.1 states, "Monitoring and evaluating industry experience also serves as a discovery activity for managing aging since other plants may discover aging effects before CCNPP." Page 60 (Section 6.3.3.5) states, "Monitoring plant and industry experience therefore provides reasonable assurance that these ARDMs will be discovered before they severely affect intended functions at CCNPP." This is not consistent with the requirements of the renewal rule.

The statements of consideration accompanying the renewal rule explicitly addresses how aging related Generic Safety Issues and Unresolved Safety Issues, that is, those being tracked in NUREG-0933, will be treated in renewal (60 FR 22484). However, for other applicable aging effects, the applicant is expected to provide a demonstration that the effects of aging will be adequately managed to ensure the intended function for renewal. Monitoring industry experience to manage aging for renewal is similar to relying on the regulatory process to manage aging for renewal, which was a proposal considered during rulemaking to revise the rule but was not adopted in the final rule.

Industry operating experience is important in identifying potential aging effects for evaluation in a renewal application. However, a renewal applicant cannot rely solely on monitoring future industry development in lieu of proposing adequate aging management programs in the renewal application. As permitted by the renewal rule, a licensee can modify the aging management programs for renewal to take advantage of future industry development following the requirements of 50.59 or 50.92 if the program is addressed by a technical specification or license condition.

Delete this option as aging management from the methodology.

24. Page 55, Section 6.3.1 discusses "Assessment/Analysis." Discuss how the structure and component intended function under CLB design loading conditions would be factored into the assessment/analysis. Also, verify that the acceptance criteria would be included in the renewal application.
25. Page 56, Section 6.3.1 discusses "Corrective Action." It should also include root cause determination and corrective actions to preclude recurrence.
26. Page 58, Section 6.3.3.1 discusses plant programs relied on for renewal. It indicates that the inservice inspection program is one of the programs. Sampling the examples in Appendix A of the report found that the specific edition of the American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel Code Section XI inservice inspection program proposed for renewal is not identified. Because the ASME Section XI program can vary with code editions, revise the methodology to have specific code editions identified for renewal programs being evaluated.

Also discuss how the methodology would ensure the reliability of ultrasonic examinations as described in Appendix VIII of the ASME Section XI code.

27. Page 58, second paragraph. Define the content of a "condition monitoring" program as discussed in this paragraph.
28. Page 58, fifth paragraph. The report states that the LRA could include a commitment to implement a program or modification at an appropriate future date before or during the extended period of operation. The report should reflect that for programs or modifications delayed until sometime during the extended period of operation and after the initial licensed term, a justification must be provided that the aging effects will be managed (or does not require management) until such implementation. Additionally, the report should be revised to state that the implementation date of future programs or modifications will be specified in the LRA.
29. Page 59, Section 6.3.3.2 indicates that aging management could rely on less formal activities, such as plant tours by managers. Provide examples on how such incidental activities can be relied on to manage aging to ensure intended functions.
30. Page 60, Section 6.3.3.4, One-time inspections
 - a) The report needs to be modified to incorporate the following. Where applicable, the staff will require that any proposed one-time inspections be performed before the end of the initial 40 year license. In this way the staff can assure itself that there are no significant aging concerns prior to operation beyond the initial licensed term. The staff may accept one time inspections after the end of the initial licensed term if the licensee provides adequate evidence that the specific issue

of concern will not be a problem up to that time.

b) the report states that the one-time inspection can be used to argue that the degradation is adequately managed. The staff believes that the correct argument should be that the degradation that is occurring will not result in loss of the component function during the period of extended operation and, therefore, no additional aging management activities or programs are necessary.

c) the report also concludes that if industry experience in the interim resolves an aging issue, a one-time inspection would be cancelled. The staff agrees that industry resolution of important aging issues will be valuable, however, a determination that the industry has resolved an issue would not relieve an applicant of a requirement or commitment to perform an inspection. (See Comment #23 for options to modify aging management programs.)

d) Page 60 (Section 6.3.3.4) indicates that a one-time inspection may be completed before the submittal of the renewal application. It also indicates that if no significant degradation is found in the inspection sample, no program is needed other than documenting the inspection. Discuss how the results of this early one-time inspection would be extrapolated to demonstrate that the effects of aging will be adequately managed for the period of extended operation.

31. Page 60, Section 6.3.3.4 gives specific examples of one-time inspection of certain structures and components for renewal. Although the one-time inspection is a useful tool for renewal, the staff has not determined whether the cited structures and components would be adequately managed for renewal by one-time inspections. For example, freeze-thaw of external concrete is weather condition related, and Alloy 600 materials have cracked in service. Because the review at this time is a methodology review, BG&E should remove the specific examples.

Similarly, on the same page, the report discusses how the one-time inspection sample may be selected. Again, the concept is useful, but the report should not mention specific components such as "valves" and "Alloy 600" in the methodology.

32. Page 62, Section 6.3.4 indicates that "Assessment," "Corrective Action," and "Confirmation" phases of the aging management are performed through the existing "site issue reporting" and "corrective action program." Describe how the existing site issue reporting and corrective action program would be sensitive to license renewal issues. For example, "Assessment" would contain acceptance criteria for evaluation to ensure license renewal intended functions. Describe how the site issue reporting and corrective action program would be alerted to those criteria, including non-safety related equipment that may not have attracted much attention before renewal.
33. Page 62, Section 6.4 indicates that the renewal application would contain a description of the programs and activities that are relied

upon to manage the effects of aging. Detailed justification of the adequacy of the programs will be maintained onsite. This proposal could result in a renewal application without sufficient detail for an NRC review. The renewal application must describe the aging management programs and justify why the proposed programs, either existing or additional, are adequate for renewal. Detailed program procedures need not be included in the application. The place for a summary description of programs and activities for managing the effects of aging is the FSAR supplement and not the renewal application. The documentation description needs to be revised accordingly.

34. Page 63, Section 7.0 addresses "Commodity Groups." Although the use of commodity groups is generally acceptable, Section 7.0 actually contains the specific aging management programs for these commodity groups. Because the report addresses the IPA methodology and the review at this time is on the methodology, the staff has not reviewed the aging management programs. BG&E should relocate specific aging management programs for commodity groups to Appendix A as examples. Aging management of commodities could follow the methodology in Section 6 of the report.

Further, the need for Section 7 of the report is unclear. Page 63 (Section 7.0) creates potential confusion by calling some commodity evaluations "equivalent to entire IPA" and some evaluations "equivalent to just AMR." It seems that all of the commodity groups could be pre-evaluated in Section 5.3, including a discussion of any special steps which caused the "equivalent to entire IPA" and "equivalent to just AMR" distinction. Then, based on the above comment, Section 7.0 may be deleted with the specific aging management programs relocated to Appendix A.

35. Page 68, Section 7.2.1.2. For all non-EQ cables, in addition to thermal aging, potential radiation hot spots should be accounted for in the aging management review for the cable commodity.
36. Page 82, Figure 8-1 indicates that, for an evaluation that otherwise meets the definition of TLAA, a "yes" response to "Is SSC covered by CLB program which updates potential TLAA?" would make the evaluation not a TLAA. This is not consistent with 54.3. The CLB program could be a basis for re-evaluating the TLAA for renewal in 54.21(c) but not a basis for disposing the issue as not a TLAA in 54.3. The report needs to be revised to properly label TLAA's.
37. Page 83 Section 8.1, What was the range of searches used to identify TLAA's?
38. Page 84, Section 8.2 indicates that EQ is not a TLAA because of a CLB program called EQ. Similarly, the methodology does not call out the containment prestressed tendons as a TLAA requiring a re-evaluation in the renewal application (see page 3-5 of Appendix A).

Issues such as EQ, metal fatigue, and prestressed tendons are TLAAs in accordance with 54.3. The renewal rule in 54.21(c) specifically requires such issues to be re-evaluated to cover the period of extended operation. Reliance on a future process in lieu of a re-evaluation in the renewal application will not satisfy the requirements of the rule.

The methodology needs to be revised so that issues such as EQ, metal fatigue, and containment prestressed tendons will also be identified as TLAAs.

39. Page 84, Section 8.3 indicates that all TLAAs subject to renewal review are necessarily affecting SSCs within the scope of renewal and therefore the IPA process would have managed aging of the long-lived passive SCs. Thus, the only TLAA issue to be reviewed is for active and short-lived SCs. Although the report correctly pointed out that TLAAs, by definition, affect the same SSCs within the scope of renewal, it is an oversimplification to say that the IPA will necessarily address the TLAAs.

TLAAs generally address aging effects that are difficult to be directly monitored. For example, there is currently no acceptable non-destructive methods to measure the extent of embrittlement of a reactor vessel. Also, there is currently no acceptable non-destructive methods to measure the integrity of cables. Thus, in general, it may be unrealistic to rely on the IPA to completely address TLAAs.

The TLAA discussion needs to be revised to better reflect the aging management expectations.

40. Page 84, Section 8.3 does not provide a methodology on how the re-evaluation of TLAAs would be performed. The rule in 54.21(c) provides options in evaluating TLAAs. Take metal fatigue as an example: A component would meet 54.21(c)(1)(i) if it has been designed for 200 fatigue cycles and is expected to see less than 200 cycles for 60 years. A component would meet 54.21(c)(1)(ii) if it has a fatigue "cumulative usage factor (CUF)" of less than 0.6 for 40 years, which would be less than unity if increased by 50 percent to cover 60 years. The option in 54.21(c)(1)(iii) would be evaluated case-by-case, such as ASME Section XI ongoing activities regarding management of components with CUFs that may have exceeded the code limit of unity.

The report should expand Section 8.3 to describe the methodology for re-evaluating TLAAs.

COMMENTS ON ATTACHMENT 2, SAMPLE APPLICATION

1. General: Appendix A of the report contains examples of technical information to be included in a renewal application. However, the examples do not contain a sufficient level of detail for the staff review.

The license renewal application provides the technical basis for a renewed license. It should contain sufficient detail, as a stand alone document, for the NRC to make a determination regarding whether the applicant has provided a demonstration that the effects of aging will be adequately managed so that the intended functions will be maintained for renewal. However, details of plant procedures need not be included in the renewal application, but are subject to NRC audit/inspection at the applicant's facility. If an industry topical report is referenced, the applicant should indicate whether it is applicable to its plant and identify any deviations.

In general, the following information on the aging management review should be included in the renewal application:

- (1) Description of the system and its structures and components being evaluated, including materials of construction and service environment
- (2) Identification of the structure and component intended functions, including CLB design loading conditions
- (3) Evaluation of the aging effects (or mechanisms if so chosen), including consideration of operating experience, to identify applicable aging effects
- (4) Identification and description of aging management programs necessary for renewal
- (5) Demonstration that aging management programs, either existing or additional, will adequately manage the effects of aging to ensure the intended functions during the period of extended operation. From a sample review of Appendix A of Attachment 2, the level of detail for the documentation supporting the conclusions is insufficient. Specifically, the same programs are referred to differently when speaking to their capabilities to manage degradation for different components.

In addition, the technical information in the application must contain an evaluation of TLAAs.

2. General: The information in Appendix A shows the review of ARDMs generally as a small lead-in paragraph under "Management of Component Aging." Further details of the ARDM evaluation and the affected SCs should be provided. This information is particularly needed for the third example, "Saltwater System," which is not the subject of any

industry topical report for renewal.

3. General: Appendix B of the report contains samples of a proposed license renewal UFSAR supplement. The write-up is basically a list of aging management programs. The following are general observations:
- (1) The program descriptions in Appendix B of the report generally do not specify the structure and component that the program is supposed to manage. For example, a program is the system walkdown which includes "visual examinations of system components." What systems or components are the operator looking at? Perhaps, the programs should be distributed in the existing FSAR such that they appear with the appropriate system, structure or component rather than lumping all programs in one place (in this case, FSAR Section 1.9) as proposed.
 - (2) The program description in Appendix B of the report is also too general, such as "procedures exist ...". What activities are actually relied on for renewal? It is questionable how such general language in the FSAR may be controlled under 50.59.
 - (3) It is not clear how TLAAs are treated in the FSAR supplement. The sample on tendon surveillance indicates that the associated TLAA "will be re-evaluated." The rule requires TLAAs to be evaluated as a part of the renewal application.

The SOC states, "The Commission has determined that ... only the information associated with the IPA regarding the basis for determining that aging effects are managed during the period of extended operation requires additional regulatory oversight afforded by placing the information in the FSAR. Therefore, only a summary description of the programs and activities for managing the effects of aging during the period of extended operation for those structures and components requiring an aging management review needs to be included in the FSAR supplement (60 FR 22482)." There is similar wording in the SOC for TLAAs. The proposed Appendix B in the BG&E report does not provide sufficient details or specifics to document the programs necessary for renewal as committed to in the renewal application. Nor does the proposed write-up contain sufficient specifics to be controlled effectively by 50.59.

4. General: Sampling the examples in Appendix A of the report found that management programs may not have addressed managing the effects of aging to ensure the intended functions under CLB design loading conditions.
5. Appendix A page 10, Section 3.0. What is the purpose of this section? If it is to reference the updated UFSAR sections, then it should refer to Appendix B. Otherwise, it's not clear why this is included in this report.
6. Appendix A page 12, Section 5.0. To the extent that the information in the updated environmental report updates information found in Chapter 2

of the UFSAR or other chapter of the UFSAR, then that information must be updated in accordance with the requirements of 10 CFR 50.71 (e). This section should note these requirements.

7. Appendix A, page 3-1 1st paragraph. The reference to the scoping process needs to be stronger. It should reference the staff's SE on the BG&E process and to the BG&E submittals discussing their methodology. The licensee should include some of the flow charts of the process as well as a summary discussion of the important steps. Chapter 2 as written does not provide enough detail for the public to understand what processes or criteria were used to do the screening or component identification. If the methodology is not approved as a separate report, then the screening process would have to be included in the license renewal application. 54.21(a)(2) requires the methodology to be submitted.
8. Appendix A page 3-2 1st paragraph
 - a) The last 2 sentences are confusing. One sentence suggests that degradation was found. It is uncertain what is meant by the statement that no conditions of unexpected or non-repairable deterioration were found. Further this paragraph states that no aging management programs are necessary without describing how the continued degradation would be handled or why the continued degradation would not affect the ability to function under the CLB for the period of extended operation. There is no technical evidence to support the stated position.
 - b) The walkdown inspection was done in 1992. The farther away from the actual application date to the referenced inspection raises additional questions about the progress of the degradation that was identified in 1992. The staff will have a hard time with data that it considers outdated.
9. Appendix A page 3-4 Fatigue. There is no technical evidence provided to support the position that fatigue is not a problem and that an aging management program is not required. There is no discussion that would suggest that this is a TLAA and is treated elsewhere in the application. More detail needs to be provided here.
10. Appendix A page 3-4 Containment liner. A one-time inspection is proposed but no time frame is provided. The one time inspections should be completed near, but prior to, the end of the current operating term. There is not justification provided that would suggest that the inspections can be performed at any later time.
11. Appendix A page 3-5, Basemat Liner. It's not clear what the aging management program is for the basemat, if any? How is the Appendix J testing relevant to demonstrating that basemat is not degrading such that the function is maintained in accordance with the CLB. Isn't the basemat barrier a water barrier rather than an air barrier?
12. Appendix A page 4-3, Core support plate and page 4-4 Core shroud tie

rod. The discussion uses the future tense to describe a one-time analysis that will be used to demonstrate that the fatigue of the core support plate is insignificant. The application should not use future tense. The information in this section should show that there is no fatigue problem. This section should present the assumptions and methodology used in the one-time analysis and the results of that analysis.

This is true for all sections of the LRA application.

13. Appendix A Core Shroud High cycle Fatigue. Finding of loose parts as the aging management program for high cycle fatigue is not sufficient.
14. Appendix A, Page 5-1. State why the Saltwater system is important to renewal. How does it meet the criteria given in the rule for the scope of what is important to renewal?