APPENDIX B, TABLE B.2.1

DISPOSITION OF NEI COMMENTS ON CHAPTER II OF GALL REPORT

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Table B.2.1: Disposition of NEI Comments on Chapter II of GALL Report

Comment Number	Item Number	Comment/Proposed Change	Basis for Comment	NRC Disposition
G-IIA1-1	A1.1 Page II A1-5 Leaching of Calcium Hydroxide Page II A1-7 Aggressive Chemical Attack Page II A1-7 Corrosion of Embedded Steel A1.2 Page II A1-11 Corrosion	There are additional requirements for inspection of inaccessible areas when there are no indications of degradation for (adjacent, nearby) accessible areas. This requirement should be removed from Evaluation and Technical Basis and Further Evaluation.	Imposing such requirements is tantamount to additional rulemaking over and above 10 CFR 50.55a without adhering to the rulemaking process. Section (b)(2)(viii)(E) of 10 CFR 50.55a says "the licensee shall evaluate the acceptability of inaccessible areas when conditions exist in accessible areas that could indicate the presence of or result in degradation to such inaccessible areas."	The GALL report is not equivalent to rulemaking. It defines a basis acceptable to the staff for aging management for license renewal. To clarify the GALL provisions for aging management of inaccessible areas, the staff has developed specific criteria that can be applied to address inaccessible areas as follows: For the "Aggressive Chemical Attack" and "Corrosion of Embedded Steel" aging mechanisms, aging management of below-grade exterior inaccessible areas is considered satisfied if the applicant establishes that the below-grade environment is not aggressive, in accordance with criteria presented in revised GALL Chapter II. For the "Leaching of Calcium Hydroxide" aging mechanism, aging management of below-grade exterior inaccessible areas is considered satisfied if the applicant establishes that this aging mechanism is not significant, in accordance with criteria presented in revised GALL Chapter II. For corrosion of inaccessible steel areas of containment, the staff's concern is that concrete containment steel liners or steel containment shells that are embedded in the concrete floor slab are potentially subject to

Table B.2.1: Disposition of NEI Comments on Chapter II of GALL Report (continued)

Comment Number	Item Number	Comment/Proposed Change	Basis for Comment	NRC Disposition
G-IIA1-1 (cont.)				degradation from inside containment (i.e., water on the containment floor seeping through cracks in the concrete floor or past degraded joint sealants). Specific criteria were added based on a proposal submitted by NEI on 12/4/00 in GALL Chapter II to address inaccessible steel areas of containments. If any of these criteria cannot be satisfied, a plant-specific aging management program is recommended to address that aging mechanism for inaccessible areas. GALL Chapter II tables were revised to incorporate this additional guidance in all applicable locations. GALL, Chapter II was revised to address this comment.
G-IIA1-2	A1.1 Page II A1-5 Leaching of Calcium Hydroxide Page II A1-7 Aggressive Chemical Attack Page II A1-7 Corrosion of Embedded Steel	Apply the findings given in Section III.A.1 for the Class I concrete structures to the "Evaluation and Technical Basis" and "Further Evaluation" columns for concrete components identified.	The technical basis for the Class I concrete structures and the concrete containment (which also is a Class 1 structure) should be consistent.	This was previously captured in GALL XI.S2 in a "Note" under Attribute (6) - Acceptance Criteria. However, to improve clarity, the specific information in GALL IIIA has been added to GALL IIA and IIB. GALL Chapter II was revised to address this comment.

Table B.2.1: Disposition of NEI Comments on Chapter II of GALL Report (continued)

Comment Number	Item Number	Comment/Proposed Change	Basis for Comment	NRC Disposition
G-IIA1-3	A1.1 Page II A1-6 Corrosion of Embedded Steel	Add the reference EPRI TR-103842. Change the Environment column to "Exposure to Aggressive Environment" to be consistent with Item IIIA1.1 on page III A1-6.	A review of the applicable references (EPRI TR-103842, Section 4.1.5, NUREG/CP-0100, Page 85, NUREG-1611, Table 1, Items 04 and 013) concluded that the discussions on "Corrosion of Embedded Steel" refers to the environment within the concrete directly surrounding the rebar. In order to manage embedment corrosion, the surrounding environment must be managed. As long as the surrounding environment does not present an "Aggressive Chemical Attack" to the cover concrete, the concrete environment surrounding the embedment is maintained. The acceptance criteria for the Aggressive Chemical Attack by soil or groundwater (or atmospheric conditions) are: pH>5.5, Chlorides <500 ppm, Sulfates < 1,500 ppm (Reference TR-103842, Section 4.1.3.3). NUREG/CP-0100 also recommends Groundwater Tests for pH, chlorides and sulfates.	The first proposed change is no longer relevant because the reference column was removed from the GALL tables. The second proposed change was incorporated in GALL Chapter II to provide consistency with GALL Chapter III. The technical information included in the justification column proposes the use of acceptance criteria for the surrounding environment, in lieu of acceptance criteria for the internal concrete environment. The staff concurs with this proposal. The following sentence has been added to the Evaluation and Technical Basis for aging effects associated with corrosion of embedded steel: "Alternatively, If the environment surrounding the concrete is not aggressive (pH > 5.5, chlorides < 500 ppm, sulfates < 1,500 ppm), corrosion of embedded steel is not significant." GALL Chapter II was revised to address this comment.
G-IIA1-4	A1.1 Page IIA1-6 Reaction with Aggregates	Aging effect should be cracking	The aging effect is cracking. Expansion would lead to cracking.	The aging effect is more correctly identified as cracking. "Expansion and Cracking" has been changed to "Cracking." GALL Chapter II was revised to address this comment.

Table B.2.1: Disposition of NEI Comments on Chapter II of GALL Report (continued)

Comment Number	Item Number	Comment/Proposed Change	Basis for Comment	NRC Disposition
G-IIA1-5	A1.1 Page IIA1-8 Settlement	Region of interest is Dome, wall and basemat.	Provided as clarification.	To be consistent with other locations in the GALL report, the word "All" has been replaced by "Dome, Wall, Basemat, Ring Girder, Buttresses." GALL Chapter II was revised to address this comment.
G-IIA1-6	A1.1 Page II A1-8 Elevated Temperature	'10 CFR 50.55a ASME Sect. XI, Subsection IWL' should be deleted from Reference column.	The implementation of 10 CFR 50.55a ASME Sect. XI, Subsection IWL would not be able to identify the loss of strength and modulus due to elevated temperature. This has been rightfully stated in the next page.	The proposed change is no longer relevant because the Reference column was removed from the GALL report. GALL Chapter II was not revised to address this comment.
G-IIA1-7	A1.1 Page II A1-8 Elevated Temperature	The following sentence should be added at the end of the existing paragraph: "Higher temperatures than given above may be allowed in the concrete if tests and/or calculations are provided to evaluate the reduction in strength and this reduction is applied to the design allowables."	ASME Section III, Division 2 should be properly quoted. As because aging management of this issue is impractical, option of accepting the elevated temperature with calculation should be available to utilities.	The proposed addition follows the requirements of ASME Section III, Division 2, Subsection CC-3440 and has been incorporated in GALL Chapter II. Evaluation of load-bearing localized areas has also been added. GALL Chapter II was revised to address this comment.
G-IIA1-8	A1.1 Page IIA1-9 Elevated temp	Evaluation and technical basis: Change second sentence to read: Thus, for any portions of concrete containment that exceed specified temperature limits, as referenced in this section, further evaluations are warranted.	The addition of "as referenced in this section" clarifies that it is only the items mentioned in the region of interest column that are evaluated.	The phrase "as referenced in this section" is not considered necessary. It is understood that the evaluation applies only to the items listed. The proposed sentence may be confusing instead of clarifying. GALL Chapter II was not revised to address this comment.

Table B.2.1: Disposition of NEI Comments on Chapter II of GALL Report (continued)

Comment Number	Item Number	Comment/Proposed Change	Basis for Comment	NRC Disposition
G-IIA1-9	A1.2 Page II A1-10 Corrosion	Delete "Structural Steel" from the Region of Interest column.	Containment structural steel is not managed by IWE, rather it is managed by the Structures Monitoring Program per item A4.2 on page III A4-6.	Reference to structural steel is inappropriate. "Structural Steel" has been replaced with "Integral Attachments" in the GALL report. Integral attachments to the containment steel shell or liner are within the scope of IWE. GALL Chapter II was revised to address this comment.
G-IIA1-10	A1.2 Page II A1-10 Corrosion	The discussion of Appendix J and Coatings Programs should be deleted.	Subsection IWE is acceptable as a stand alone program. In the package which was generated in support of the final rulemaking to incorporate by reference into 10 CFR 50.55a ASME Section XI Subsection IWE, it was stated that the inspection criteria of IWE is incorporated to assure that the critical areas of containment are periodically inspected to detect and take corrective actions for defects that could compromise a containment's structural integrity.	The leak tightness is an intended function of containment [10 CFR 54.4(a)(1)(iii)] and is not included in the ISI requirements of IWE. Measurement of an unacceptable leak rate would require an assessment of the cause. The cause may be due to aging degradation from loss of material, cracking, and/or change in material properties. Consequently, this program supplements the ISI program for detecting aging effects. Although the 1992 and 1995 editions of IWE reference App. J leak rate testing for certain examinations, they are not as comprehensive as the requirements of 10 CFR Part 50, Appendix J. In addition, the 1998 and later editions of IWE no longer reference App. J leak rate testing. With respect to the Coatings Program, the GALL report (XI.S8) defines a technical basis acceptable to the staff for a coatings monitoring

Table B.2.1: Disposition of NEI Comments on Chapter II of GALL Report (continued)

Comment Number	Item Number	Comment/Proposed Change	Basis for Comment	NRC Disposition
G-IIA1-10 (cont.)				and maintenance program. If a coatings program is credited for managing loss of material due to corrosion during the current licensing term, then the GALL report recommends that it should be continued during the period of extended operation. An example of this is a relief request from IWE inspections based on maintenance of protective coatings to control corrosion. The staff has clarified the Chapter II of the GALL report in all applicable locations with respect to the protective coatings program. GALL Chapter II was revised to address this comment.
G-IIA1-11	A1.2 Page II A1-12 Corrosion of Tendons	Delete reference NUREG-1522.	NUREG-1522 is not a mandated program and should be deleted from the Reference column.	The proposed change is no longer relevant because the reference column was removed from the GALL report. GALL Chapter II was not revised to address this comment.
G-IIA1-12	A1.2 Page II A1-12 Relaxation	Add reference ACI 318-95.	Other methods such as ACI-318-95 may be more accurate, appropriate or current.	The proposed change is no longer relevant because the reference column was removed from the GALL report. Also ACI 318-95 does not address TLAA for loss of tendon prestress. GALL Chapter II was not revised to address this comment.

Table B.2.1: Disposition of NEI Comments on Chapter II of GALL Report (continued)

Comment Number	Item Number	Comment/Proposed Change	Basis for Comment	NRC Disposition
G-IIA1-13	A1.3 Page IIA1-13 Corrosion of tendons	Delete the paragraph under evaluation and technical basis that discusses the tendon gallery.	The environment of the tendon gallery is similar to the external dome environment. Both environments subject the tendon anchorage to moisture, humidity, etc. Therefore, the tendon gallery environment is not unique and should not be singled out. In addition, the tendon anchorages are protected from the moist, humid environment by the tendon caps and grease which is within the cap. The tendon anchorages are evaluated by Subsection IWL regardless of where they are located. Tendon anchorage within the tendon gallery would be evaluated by Subsection IWL.	The discussion of the tendon access gallery was for information only, to indicate that managing the condition and environment in the tendon access gallery is a prudent way to manage degradation of tendon anchorage components located there. GALL did not impose any requirement for aging management of the tendon access gallery because the tendon access gallery does not serve an intended function, in accordance with the criteria of 10 CFR Part 54. Since the paragraph in question is not an essential part of GALL, it has been deleted from GALL Chapter II in all applicable locations. GALL Chapter II was revised to address this comment.
G-IIA2-1	A2.1 Page IIA2-5 Corrosion	Delete Appendix J and Coatings Program from AMP and evaluation and Technical Basis.	Subsection IWE is acceptable as a stand alone program. In the package which was generated in support of the final rulemaking to incorporate by reference into 10 CFR 50.55a ASME Section XI Subsection IWE, it was stated that the inspection criteria of IWE is incorporated to assure that the critical areas of containment are periodically inspected to detect and take corrective actions for defects that could compromise a containment's structural integrity.	See NRC Disposition of NEI Comment G-IIA1-10 in this Appendix B, Table B.2.1. .

Table B.2.1: Disposition of NEI Comments on Chapter II of GALL Report (continued)

Comment Number	Item Number	Comment/Proposed Change	Basis for Comment	NRC Disposition
G-IIA2-3	A2.1 Page IIA2-5 Corrosion A2.2 Page IIA2-7 Leaching of Calcium Hydroxide Page IIA2-7 Aggressive Chemical Attack Page IIA2-9 Corrosion of Embedded Steel	There are additional requirements for inspection of inaccessible areas when there are no indications of degradation for (adjacent, nearby) accessible areas. This requirement should be removed from Evaluation and Technical Basis and Further Evaluation.	Imposing such requirements is tantamount to additional rulemaking over and above 10 CFR 50.55a without adhering to the rulemaking process. Section (b)(2)(ix)(A) of 10 CFR 50.55a says “the licensee shall evaluate the acceptability of inaccessible areas when conditions exist in accessible areas that could indicate the presence of or result in degradation to such inaccessible areas.”	See NRC Disposition of NEI Comment G-IIA1-1 in this Appendix B, Table B.2.1.

Table B.2.1: Disposition of NEI Comments on Chapter II of GALL Report (continued)

Comment Number	Item Number	Comment/Proposed Change	Basis for Comment	NRC Disposition
G-IIA2-4	A2.2 Pages II A2-6 & II A2-7 Freeze/Thaw, Leaching of Calcium Hydroxide, Aggressive Chemical Attack Pages II A2-8 & II A2-9 Reaction of Aggregate and Corrosion of Embedded Steel Pages IIA2-10 & IIA2-11 Elevated Temperature	In lieu of ASME XI, IWL, licensees should be able to credit the Maintenance Rule 10CFR50.65, Regulatory Guide 1.160 Rev.2, and NUMARC 93-01. Add these references to the reference column. Add "or Structures Monitoring Program" in the AMP column and add statement "See Chapter XI.S6" in the Evaluation & Technical Basis column.	In lieu of ASME XI, IWL, licensees should be able to credit the Maintenance Rule 10CFR50.65, Regulatory Guide 1.160 Rev.2, and NUMARC 93-01. BASIS: These programs are particularly effective for structures and supports, which are not currently under the scope of ASME XI-IWL. The structural monitoring programs developed under MR have been mandated since 1996 and therefore provide operating experience and effectiveness demonstration. NEI submitted a paper to the NRC dated 3/26/99, regarding structural monitoring programs, with a request to declare the structural monitoring program an effective aging management program for structures on a generic basis.	The first proposed change is no longer relevant because the reference column was removed from the GALL report. The second proposed change, to credit the Structures Monitoring Program (XI.S6) in lieu of IWL (XI.S2) is inappropriate. The Structures Monitoring Program is applicable to concrete not within the IWL scope. An applicant cannot substitute the Structures Monitoring Program for aging management of concrete that is within the IWL scope. GALL Chapter II was not revised to address this comment.
G-IIA2-5	A2.2 Page IIA2-11 Elevated temp	Evaluation and technical basis: Change second sentence to read: Thus, for any portions of concrete containment that exceed specified temperature limits, as referenced in this section, further evaluations are warranted.	The addition of "as referenced in this section" clarifies that it is only the items mentioned in the region of interest column that are evaluated.	See NRC Disposition of NEI Comment G-IIA1-8 in this Appendix B, Table B.2.1.

Table B.2.1: Disposition of NEI Comments on Chapter II of GALL Report (continued)

Comment Number	Item Number	Comment/Proposed Change	Basis for Comment	NRC Disposition
G-IIA3-1	A3.1 Page II A3-4 Corrosion	Delete the dissimilar metal welds from the Material column.	10 CFR 50.55a(b)(x)(C) states that the examination of these items is optional.	10 CFR 50.55a does not state that examination of dissimilar metal welds is optional. 10 CFR 50.55a states that IWE Examination Category E-F, which is a surface examination of dissimilar metal welds (e.g., liquid penetrant inspection), is optional. IWE Examination Categories E-A and E-C are also applicable to dissimilar metal welds and are required by 10 CFR 50.55a. Based on discussion with NEI at the 1/30/01 meeting, GALL Chapter II was revised at all appropriate locations to indicate that IWE Examination Category E-F is optional. GALL Chapter II was revised to address this comment.
G-IIA3-2	A3.1 Page IIA3-5 Penetration sleeves	Delete coatings program.	ASME Subsection IWE and Appendix J tests are adequate without the coatings program.	See NRC Disposition of NEI Comment G-IIA1-10 in this Appendix B, Table B.2.1. .
G-IIA3-3	A.3.1 Page II A3-6 Fatigue	Delete the dissimilar metal welds from the Material column.	10 CFR 50.55a(b)(x)(C) states that the examination of this item is optional.	Fatigue is a TLAA and is not addressed by 10 CFR 50.55a. GALL Chapter II was not revised to address this comment.
G-IIA3-4	A.3.1 Page II A3-6 & II A3-7 SCC, Cyclic Loading	Delete the dissimilar metal welds from the Material column and Evaluation and Technical Basis column.	10 CFR 50.55a(b)(x)(C) states that the examination of this item is optional.	See NRC Disposition of NEI Comment G-IIA3-1 in this Appendix B, Table B.2.1.

Table B.2.1: Disposition of NEI Comments on Chapter II of GALL Report (continued)

Comment Number	Item Number	Comment/Proposed Change	Basis for Comment	NRC Disposition
G-IIA3-5	A.3.1 Page II A3-7 SCC, Cyclic Loading	Delete the comment "(one option may be to perform VT-1 visual inspections)" from attribute (4).	VT-1 is not an effective examination for fine cracks such as fatigue. Additionally, most of the metal surfaces are coated. A more effective method is the leak test of Appendix J for non-fatigue CLB plants.	Visual inspection VT-1 is not effective. The phrase "(one option may be to perform VT-1 visual inspections)" has been deleted throughout GALL Chapters II and III, as applicable. The applicant should describe a plant-specific approach to detection of fine cracks in its application. GALL Chapter II was revised to address this comment.
G-IIA3-6	A3.2 Page IIA3-9 Airlock	Delete coatings program.	ASME Subsection IWE and Appendix J tests are adequate without the coatings program.	See NRC Disposition of NEI Comment G-IIA1-10 in this Appendix B, Table B.2.1.
G-IIA3-7	A3.2 Page II A3-10 Mechanical Wear of Locks	Reword the Aging Mechanism column to read as follows: "Mechanical Wear of Locks, Hinges and Closure Mechanisms required to maintain the airlock/hatch in the closed position."	Should only evaluate the components required to maintain the hatch in the closed position to support the intended function (essentially leak tight barrier).	A passive intended function meeting the criteria of 10 CFR Part 54 exists for locks, hinges, and closure mechanisms on containment airlocks and hatches during normal operation. It is to maintain leak-tight integrity of airlocks and hatches when they are in the closed position. Consequently, the wording in GALL IIA.3 and IIB.4 was revised to be consistent with NEI's original comment. The staff maintains that these items are within the LR scope. The staff has revised GALL to specify that aging management is accomplished by existing Appendix J leak rate testing and plant-specific Technical Specifications. No augmentation or further evaluation is needed. GALL Chapter II was revised to address this comment.

Table B.2.1: Disposition of NEI Comments on Chapter II of GALL Report (continued)

Comment Number	Item Number	Comment/Proposed Change	Basis for Comment	NRC Disposition
G-IIB1-1	B1.1.1 Page II B1-5 Corrosion	There are additional requirements for inspection of inaccessible areas when there are no indications of degradation for (adjacent, nearby) accessible areas. This requirement should be removed from Evaluation and Technical Basis and Further Evaluation.	Imposing such requirements is tantamount to additional rulemaking over and above 10 CFR 50.55a without adhering to the rulemaking process. Section (b)(2)(ix)(A) of 10 CFR 50.55a says "the licensee shall evaluate the acceptability of inaccessible areas when conditions exist in accessible areas that could indicate the presence of or result in degradation to such inaccessible areas."	See NRC Disposition of NEI Comment G-IIA1-1 in this Appendix B, Table B.2.1.
G-IIB1-2	B1.1.1 Page II B1-5 Corrosion	The discussion of Appendix J and Coatings Programs should be deleted.	IWE is acceptable as a stand-alone program.	See NRC Disposition of NEI Comment G-IIA1-10 in this Appendix B, Table B.2.1.
G-IIB1-3	B.1.1 Page II B1-7 Steel Elements Cyclic Loading	Delete the comment "(one option may be to perform VT-1 visual inspections)" from attribute (4).	VT-1 is not an effective examination for fine cracks such as fatigue. Additionally, most of the metal surfaces are coated. A more effective method is the leak test of Appendix J for non-fatigue CLB plants.	See NRC Disposition of NEI Comment G-IIA3-5 in this Appendix B, Table B.2.1.
G-IIB2-1	B2.1.1 Page II B2-5 Corrosion	There are additional requirements for inspection of inaccessible areas when there are no indications of degradation for (adjacent, nearby) accessible areas. This requirement should be removed from Evaluation and Technical Basis and Further Evaluation.	Imposing such requirements is tantamount to additional rulemaking over and above 10 CFR 50.55a without adhering to the rulemaking process. Section (b)(2)(ix)(A) of 10 CFR 50.55a says "the licensee shall evaluate the acceptability of inaccessible areas when conditions exist in accessible areas that could indicate the presence of or result in degradation to such inaccessible areas."	See NRC Disposition of NEI Comment G-IIA1-1 in this Appendix B, Table B.2.1.

Table B.2.1: Disposition of NEI Comments on Chapter II of GALL Report (continued)

Comment Number	Item Number	Comment/Proposed Change	Basis for Comment	NRC Disposition
G-IIB2-2	B2.1.1 Page II B2-7 Steel Elements Cyclic Loads	Delete the comment "(one option may be to perform VT-1 visual inspections)" from attribute (4).	VT-1 is not an effective examination for tight cracks such as fatigue. Additionally, most of the metal surfaces are coated. A more effective method is the leak test of Appendix J for non-fatigue CLB plants.	See NRC Disposition of NEI Comment G-IIA3-5 in this Appendix B, Table B.2.1.
G-IIB2-3	B2.2.1 Page II B2-9 Concrete Elements Leaching	Delete the "Yes" and the description from the Further Evaluation column and replace with "No".	The leaching of Calcium Hydroxide requires the free flow of water across the concrete section (i.e. via through-wall cracks). If both sides of the concrete are not accessible, no flow can occur. If one side is accessible (exposed) then indication of degradation is evident and the concern does not apply.	See NRC Disposition of NEI Comment G-IIA1-1 in this Appendix B, Table B.2.1.
G-IIB2-4	B2.2.1 Page II B2-9 Leaching of Calcium Hydroxide Page II B2-9 Aggressive Chemical Attack Page II B2-11 Corrosion of Embedded Steel	There are additional requirements for inspection of inaccessible areas when there are no indications of degradation for (adjacent, nearby) accessible areas. This requirement should be removed from Evaluation and Technical Basis and Further Evaluation.	Imposing such requirements is tantamount to additional rulemaking over and above 10 CFR 50.55a without adhering to the rulemaking process. Section (b)(2)(ix)(A) of 10 CFR 50.55a says "the licensee shall evaluate the acceptability of inaccessible areas when conditions exist in accessible areas that could indicate the presence of or result in degradation to such inaccessible areas."	See NRC Disposition of NEI Comment G-IIA1-1 in this Appendix B, Table B.2.1.

Table B.2.1: Disposition of NEI Comments on Chapter II of GALL Report (continued)

Comment Number	Item Number	Comment/Proposed Change	Basis for Comment	NRC Disposition
G-IIB2-5	B2.2.1 Page II B2-9 Concrete Elements	In the "Evaluation and Technical Basis" and "Further Evaluation" columns for the Mark 2 and 3 concrete components for Leaching of Calcium Hydroxide, Aggressive Chemical Attack, Reaction with Aggregates and Corrosion of Embedded Steel aging mechanisms, apply the findings given in Section III.A.1 for the Class I concrete structures.	The technical basis for the Class I concrete structures and the concrete containment (which also is a Class 1 structure) should be consistent. This comment also applies to the PWR concrete containment, Section IIA for the same aging mechanisms.	See NRC Disposition of NEI Comment G-IIA1-2 in this Appendix B, Table B.2.1.
G-IIB2-6	B2.2.2 Page II B2-15 Corrosion	There are additional requirements for inspection of inaccessible areas when there are no indications of degradation for (adjacent, nearby) accessible areas. This requirement should be removed from Evaluation and Technical Basis and Further Evaluation.	Imposing such requirements is tantamount to additional rulemaking over and above 10 CFR 50.55a without adhering to the rulemaking process. Section (b)(2)(ix)(A) of 10 CFR 50.55a says "the licensee shall evaluate the acceptability of inaccessible areas when conditions exist in accessible areas that could indicate the presence of or result in degradation to such inaccessible areas."	See NRC Disposition of NEI Comment G-IIA1-1 in this Appendix B, Table B.2.1.
G-IIB3-1	B3.1.1 Page II B3-5 Corrosion	There are additional requirements for inspection of inaccessible areas when there are no indications of degradation for (adjacent, nearby) accessible areas. This requirement should be removed from Evaluation and Technical Basis and Further Evaluation.	Imposing such requirements is tantamount to additional rulemaking over and above 10 CFR 50.55a without adhering to the rulemaking process. Section (b)(2)(ix)(A) of 10 CFR 50.55a says "the licensee shall evaluate the acceptability of inaccessible areas when conditions exist in accessible areas that could indicate the presence of or result in degradation to such inaccessible areas."	See NRC Disposition of NEI Comment G-IIA1-1 in this Appendix B, Table B.2.1.

Table B.2.1: Disposition of NEI Comments on Chapter II of GALL Report (continued)

Comment Number	Item Number	Comment/Proposed Change	Basis for Comment	NRC Disposition
G-IIB3-2	B3.1.2 Page II B3-7 Leaching of Calcium Hydroxide Page II B3-9 Aggressive Chemical Attack Page II B3-9 Corrosion of Embedded Steel	There are additional requirements for inspection of inaccessible areas when there are no indications of degradation for (adjacent, nearby) accessible areas. This requirement should be removed from Evaluation and Technical Basis and Further Evaluation.	Imposing such requirements is tantamount to additional rulemaking over and above 10 CFR 50.55a without adhering to the rulemaking process. Section (b)(2)(ix)(A) of 10 CFR 50.55a says "the licensee shall evaluate the acceptability of inaccessible areas when conditions exist in accessible areas that could indicate the presence of or result in degradation to such inaccessible areas."	See NRC Disposition of NEI Comment G-IIA1-1 in this Appendix B, Table B.2.1.
G-IIB3-3	B3.2.1 Pages II B3-13 & II B3-15 Concrete Elements	In the "Evaluation and Technical Basis" and "Further Evaluation" columns for the Mark 2 and 3 concrete components for Leaching of Calcium Hydroxide, Aggressive Chemical Attack, Reaction with Aggregates and Corrosion of Embedded Steel aging mechanisms, apply the findings given in Section III.A.1 for the Class I concrete structures.	The technical basis for the Class I concrete structures and the concrete containment (which also is a Class 1 structure) should be consistent.	See NRC Disposition of NEI Comment G-IIA1-2 in this Appendix B, Table B.2.1.

Table B.2.1: Disposition of NEI Comments on Chapter II of GALL Report (continued)

Comment Number	Item Number	Comment/Proposed Change	Basis for Comment	NRC Disposition
G-IIB3-4	B3.2.1 Page II B3-13 Leaching of Calcium Hydroxide Page II B3-13 Aggressive Chemical Attack Page II B3-15 Corrosion of Embedded Steel	There are additional requirements for inspection of inaccessible areas when there are no indications of degradation for (adjacent, nearby) accessible areas. This requirement should be removed from Evaluation and Technical Basis and Further Evaluation.	Imposing such requirements is tantamount to additional rulemaking over and above 10 CFR 50.55a without adhering to the rulemaking process. Section (b)(2)(ix)(A) of 10 CFR 50.55a says "the licensee shall evaluate the acceptability of inaccessible areas when conditions exist in accessible areas that could indicate the presence of or result in degradation to such inaccessible areas."	See NRC Disposition of NEI Comment G-IIA1-1 in this Appendix B, Table B.2.1.
G-IIB3-5	B3.2.2 Page II B3-19 Corrosion	There are additional requirements for inspection of inaccessible areas when there are no indications of degradation for (adjacent, nearby) accessible areas. This requirement should be removed from Evaluation and Technical Basis and Further Evaluation.	Imposing such requirements is tantamount to additional rulemaking over and above 10 CFR 50.55a without adhering to the rulemaking process. Section (b)(2)(ix)(A) of 10 CFR 50.55a says "the licensee shall evaluate the acceptability of inaccessible areas when conditions exist in accessible areas that could indicate the presence of or result in degradation to such inaccessible areas."	See NRC Disposition of NEI Comment G-IIA1-1 in this Appendix B, Table B.2.1.
G-IIB4-1	B.4.1 Page II B4-4 Corrosion	Delete the dissimilar metal welds from the Material column.	10 CFR 50.55a(b)(x)(C) states that the examination of this item is optional.	See NRC Disposition of NEI Comment G-IIA3-1 in this Appendix B, Table B.2.1.
G-IIB4-2	B.4.1 Page II B4-6 Fatigue	Delete the dissimilar metal welds from the Material column.	10 CFR 50.55a(b)(x)(C) states that the examination of this item is optional.	See NRC Disposition of NEI Comment G-IIA3-3 in this Appendix B, Table B.2.1.

Table B.2.1: Disposition of NEI Comments on Chapter II of GALL Report (continued)

Comment Number	Item Number	Comment/Proposed Change	Basis for Comment	NRC Disposition
G-IIB4-3	B4.1 Page II B4-6 Cyclic Loading	Cracking due to cyclic loading is a TLAA and should be addressed similar to Item B4.1 Fatigue.	Cyclic loading only applies to some penetrations and torus-attached piping, which are required to have a fatigue analysis under the Containment Loads Program.	If a CLB fatigue analysis exists, then this is covered under the “Fatigue” aging mechanism. The “Cyclic Loading” aging mechanism is intended to address cases where cyclic loading is applicable, but a CLB fatigue analysis does not exist. GALL IIB4 and IIA3 were revised to clarify this distinction. GALL Chapter II was revised to address this comment.

Table B.2.1: Disposition of NEI Comments on Chapter II of GALL Report (continued)

Comment Number	Item Number	Comment/Proposed Change	Basis for Comment	NRC Disposition
G-IIB4-4	B.4.1 Page II B4-7 SSC, Cyclic Loading	Delete reference to augmented VT-1 examinations of bellows and dissimilar metal welds.	Fatigue and SCC cracks cannot be detected by VT-1 or by any surface examination. The Type B local leak test per Appendix J is the most effective method, particularly for two-ply bellows, which are normally pressurized between the plies.	With respect to fatigue cracks, see NRC Disposition of NEI Comment G-IIA3-5 in this Appendix B, Table B.2.1. With respect to SCC cracks, the staff notes that problems regarding Type B local leak rate testing for 2-ply bellows have been described in NRC IN 92 20; this should be addressed in an applicant's Appendix J program. In the Evaluation and Technical Basis, Attribute (4), for SCC, "augmented VT-1 visual examination" has been deleted and the last sentence revised to read: "For the period of extended operation, Examination Categories E-B & E-F and additional appropriate examinations to detect SCC in bellows assemblies and dissimilar metal welds are warranted to address this issue." This revision has been implemented throughout GALL Chapter II, as applicable. GALL Chapter II was revised to address this comment.