



NUCLEAR ENERGY INSTITUTE

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PROJECT MANAGER, LICENSING  
AND PERFORMANCE-BASED  
REGULATION

October 21, 1996

Mr. Scott F. Newberry  
License Renewal Project Directorate  
Division of Reactor Program Management  
Office of Nuclear Reactor Regulation  
U.S. Nuclear Regulatory Commission  
Washington, DC 20006

**ATTENTION:** Document Control Desk

Project 690

Dear Mr. Newberry:

Section 1.5 of NEI 95-10 "Guidelines for Implementing the Requirements of 10 CFR Part 54 - The License Renewal Rule," addresses the topic of resolution of generic safety issues (GSIs) and unresolved safety issues (USIs). Specifically, the guidance states, "GSIs and USIs that do not contain issues related to the license renewal aging management review or time-limited aging evaluation need not be reviewed." In this light, we reviewed NUREG 0933, "A Prioritization of Generic Safety Issues" to determine which GSIs/USIs are applicable to license renewal.

The results of this review are presented in Enclosure 1. In summary, we found only two GSIs that are applicable to license renewal:

**GENERIC SAFETY ISSUE**

**TITLE**

166

Adequacy of Fatigue Life of Metal  
Components

168

Environmental Qualification of Electrical  
Equipment

We request NRC review of Enclosure 1 and endorse the results for inclusion as an Appendix to NEI 95-10. We are available to meet with you to discuss any comments you may have.

If you have any questions in the interim, please call me at (202) 739-8093.

Sincerely,

Douglas J. Walters

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Enclosure

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**NEI REVIEW OF GSIs/USIs FOR LICENSE RENEWAL**

NEI 95-10, Section 1.5 states: "Generic resolution of a generic safety issue (GSI) or unresolved safety issue (USI) is not necessary for issuance of a renewal license. GSIs and USIs that do not contain issues related to the license renewal aging management review or time-limited aging evaluation need not be reviewed. However, designation of an issue as GSI or USI does not exclude the issue from the scope of the aging management review or time-limited aging evaluation."

This report identifies those generic safety issues that *may* be addressed concurrently with the aging management review process and time-limited aging evaluations required by the license renewal rule, 10 CFR Part 54.

The initial step in our approach was to review the NRC's program to identify and resolve generic safety issues. This program is described in NUREG-0933, A *Prioritization of Generic Safety Issues*.

Specifically, we reviewed Table II of NUREG 0933. This table lists all USIs/GSIs and identifies a safety priority ranking for each one. The legend for this table explains the ranking system. For generic safety issues, the rank is either "high", "medium", or "low" or the item has one of the following five notes.

**Note 1:** "Possible Resolution Identified for Evaluation"

**Note 2:** "Resolution Available"

**Note 3:** "Resolution Resulted in either: (a) The Establishment of New Regulatory Requirements, or (b) No New Requirements"

**Note 4:** "Issue to be Prioritized in the Future"

**Note 5:** "Issue that is not a Generic Safety Issue but should be Assigned Resources for Completion."

Items with Note 2 or Note 3 are resolved and this need not be considered during any license renewal review. Resolved items have either resulted in the establishment of new regulatory requirements or no new requirements. Items with status Note 5 are not generic safety issues but ones that should be assigned resources for completion. Items with a status of Note 1 or Note 4 are those that may be addressed concurrently with the aging management reviews and TLAA evaluations being performed to meet the requirements of license renewal.

Our review of Table II of NUREG 0933 (through Revision 19, dated June 30, 1995) initially identified unresolved generic safety issues that meet the above criteria

(i.e., Note 1, Note 4, High Safety Priority, Medium Safety Priority, or Low Safety Priority). Subsequently, we reviewed each of these unresolved generic safety issues to determine if they concern themselves with aging effects associated with structures and components within the scope of license renewal.

Further, we assigned a license renewal ranking to each item. Issues that consider aging effects on long-lived passive structures and components or time-limited aging analyses and are not "low priority" are assigned a License Renewal Ranking of 1, meaning they are applicable to license renewal. Issues which do not consider aging effects or long-lived passive structures or are of "low priority" ranking are designated as License Renewal Ranking of 2, meaning they are not applicable to license renewal. Those issues for which insufficient information is presented in NUREG 0933 have been identified with a License Renewal Ranking of 0. Table 1 documents the results of our review.

In summary, the unresolved generic safety issues that are described in NUREG 0933 and which may be addressed concurrently with the aging management reviews and TLAA evaluations required by license renewal are as follows:

<b>Action Plan Item/Issue Number</b>	<b>Title</b>
166	Adequacy of Fatigue Life of Metal Components
168	Environmental Qualification of Electrical Equipment

**Table 1**  
**Generic Safety Issue Review for License Renewal**  
(in numerical order)

Action Plan Item / Issue No.	Title	NRC Ranking <sup>1</sup>	Comment	License Renewal Ranking <sup>2</sup>
A-21	Main Steamline Break Inside Containment - Evaluation of Environmental Conditions for Equipment Qualifications	Low	Topic does not involve a long-lived, passive structure or component and/or an aging effect of concern for license renewal. In addition, this GSI is considered a low priority and has not been updated since 11/30/83. A low priority ranking means that no safety concerns demanding at least medium priority attention are involved and there is little or no prospect of safety improvements that are both substantial and worthwhile (NUREG-0933).	2
A-38	Tornado Missiles	Low	Topic does not involve a long-lived, passive structure or component and/or an aging effect of concern for license renewal.	2

<sup>1</sup> Note 1 = Possible Resolution Identified for Evaluation  
Note 4 = Issue to be Prioritized in the Future  
High = High Safety Priority  
Medium = Medium Safety Priority  
Low = Low Safety Priority

<sup>2</sup> 0 = Insufficient Information  
1 = Of interest to License Renewal  
2 = Not of interest to License Renewal

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**Generic Safety Issue Review for License Renewal**  
(in numerical order)

Action Plan Item / Issue No.	Title	NRC Ranking <sup>1</sup>	Comment	License Renewal Ranking <sup>2</sup>
B-17	Criteria for Safety Related Operator Actions	Medium	Topic does not involve a long-lived, passive structure or component and/or an aging effect of concern for license renewal.	2
B-55	Improved Reliability of Target Rock Safety Relief Valves	Medium	Topic does not involve a long-lived, passive structure or component and/or an aging effect of concern for license renewal.	2
B-61	Allowable ECCS Equipment Outage Periods	Medium	Topic does not involve a long-lived, passive structure or component and/or an aging effect of concern for license renewal.	2
D-1	Advisability of Seismic Scram	Low	Topic does not involve a long-lived, passive structure or component and/or an aging effect of concern for license renewal.	2

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Action Plan Item / Issue No.	Title	NRC Ranking <sup>1</sup>	Comment	License Renewal Ranking <sup>2</sup>
15	Radiation Effects on Reactor Vessel Supports	High	An aging effect of concern for license renewal is considered in this topic: loss of material toughness of reactor vessel support structure. However, NRC review of this GSI is complete and has been formally closed with the publication of NUREG-1509, "Radiation Effects on Reactor Vessel Supports (GSI-15)." SECY-96-092 dated May 1, 1996	2
23	Reactor Coolant Pump Seal Failures	High	Topic does not involve a long-lived, passive structure or component and/or an aging effect of concern for license renewal. (Status of this item was reported in IN 95-42 dated 9/22/95)	2
24	Automatic ECCS Switchover to Recirculation	Medium	Topic does not involve a long-lived, passive structure or component and/or an aging effect of concern for license renewal.	2



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Action Plan Item / Issue No.	Title	NRC Ranking <sup>1</sup>	Comment	License Renewal Ranking <sup>2</sup>
35	Degradation of Internal Appurtenances in LWRs	Low	An aging effect of concern for license renewal appears to be considered in this topic. However, this GSI is considered a low priority and has not been updated since 06/30/85. A low priority ranking means that no safety concerns demanding at least medium priority attention are involved and there is little or no prospect of safety improvements that are both substantial and worthwhile (NUREG-0933).	2
71	Failure of Resin Demineralizer Systems and their Effects on Nuclear Plant Safety	Low	Topic does not involve a long-lived, passive structure or component and/or an aging effect of concern for license renewal.	2
78	Monitoring of Fatigue Transient Limits for Reactor Coolant System	Medium	An aging effect of concern for license renewal appears to be considered in this topic. This issue has been subsumed under GSI 166.	2
80	Pipe Break Effects on Control Rod drive Hydraulic Lines in Drywells of BWR Mark I and II Containments	Low	Topic does not involve a long-lived, passive structure or component and/or an aging effect of concern for license renewal.	2

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(in numerical order)

Action Plan Item / Issue No.	Title	NRC Ranking <sup>1</sup>	Comment	License Renewal Ranking <sup>2</sup>
81	Impact of Locked Doors and Barriers on Plant and Personnel Safety	Low	Topic does not involve a long-lived, passive structure or component and/or an aging effect of concern for license renewal.	2
83	Control Room Habitability	Note 1	Topic does not involve a long-lived, passive structure or component and/or an aging effect of concern for license renewal.	2
89	Stiff Pipe Clamps	Low	Topic does not involve a long-lived, passive structure or component and/or an aging effect of concern for license renewal.	2
90	Technical Specifications for Anticipatory Trips	Low	Topic does not involve a long-lived, passive structure or component and/or an aging effect of concern for license renewal.	2
92	Fuel Crumbling During LOCA	Low	Topic does not involve a long-lived, passive structure or component and/or an aging effect of concern for license renewal.	2
107	Main Transformer Failures	Low	Topic does not involve a long-lived, passive structure or component and/or an aging effect of concern for license renewal.	2



**Table 1**  
**Generic Safety Issue Review for License Renewal**  
(in numerical order)

Action Plan Item / Issue No.	Title	NRC Ranking <sup>1</sup>	Comment	License Renewal Ranking <sup>2</sup>
122.3	Physical Security System Constraints	Low	Topic does not involve a long-lived, passive structure or component and/or an aging effect of concern for license renewal.	2
125.II.14	Remote Operation of Equipment which must now be Operated Locally	Low	Topic does not involve a long-lived, passive structure or component and/or an aging effect of concern for license renewal.	2
127	Maintenance and Testing of Manual Valves in Safety Related Systems	Low	Topic does not involve a long-lived, passive structure or component and/or an aging effect of concern for license renewal.	2
138	Deinerting of BWR Mark I and II Containments During Power Operations...	Low	Topic does not involve a long-lived, passive structure or component and/or an aging effect of concern for license renewal.	2
144	Scram Without a Turbine Generator Trip	Low	Topic does not involve a long-lived, passive structure or component and/or an aging effect of concern for license renewal.	2
145	Actions to Reduce Common Cause Failures	Note 1	Topic does not involve a long-lived, passive structure or component and/or an aging effect of concern for license renewal.	2

**Table 1**  
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Action Plan Item / Issue No.	Title	NRC Ranking <sup>1</sup>	Comment	License Renewal Ranking <sup>2</sup>
149	Adequacy of Fire Barriers	Low	Topic does not involve a long-lived, passive structure or component and/or an aging effect of concern for license renewal. In addition, this GSI is considered a low priority. A low priority ranking means that no safety concerns demanding at least medium priority attention are involved and there is little or no prospect of safety improvements that are both substantial and worthwhile (NUREG-0933).	2
152	Design Basis for Valves that might be Subjected to Significant Blowdown Loads	Low	Topic does not involve a long-lived, passive structure or component and/or an aging effect of concern for license renewal.	2
156.6.1	Pipe Break Effects on Systems and Components	Note 4	No description of this topic is presented in NUREG-0933.	0
158	Performance of Power Operated Valves under Design Basis Conditions	Medium	Topic does not involve a long-lived, passive structure or component and/or an aging effect of concern for license renewal.	2
163	Multiple Steam Generator Tube Leakage	Note 4	No description of this topic is presented in NUREG-0933.	0

**Table 1**  
**Generic Safety Issue Review for License Renewal**  
(in numerical order)

Action Plan Item / Issue No.	Title	NRC Ranking <sup>1</sup>	Comment	License Renewal Ranking <sup>2</sup>
165	Safety and Safety/Relief Valve Reliability	High	Topic does not involve a long-lived, passive structure or component and/or an aging effect of concern for license renewal.	2
166	Adequacy of Fatigue Life of Metal Components	Note 1	An aging effect of concern for license renewal is considered in this topic: fatigue	1
168	Environmental Qualification of Electrical Equipment	Note 1	An aging effect of concern for license renewal is considered in this topic: environmental qualification of electrical components.	1
169	BWR MSIV Common Mode Failure due to Loss of Accumulator Pressure	Note 4	Topic does not involve a long-lived, passive structure or component and/or an aging effect of concern for license renewal.	2
171	ESF Failure from LOOP Subsequent to a LOCA	High	Topic does not involve a long-lived, passive structure or component and/or an aging effect of concern for license renewal.	2