



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

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Allison

MEMORANDUM FOR: Thomas E. Murley, Director
Office of Nuclear Reactor Regulation

Eric S. Beckjord, Director
Office of Nuclear Regulatory Research

Robert M. Bernero, Director
Office of Nuclear Materials Safety
and Safeguards

FROM: Edward L. Jordan, Chairman
Committee to Review Generic Requirements

SUBJECT: SUBMITTAL OF CRGR REVIEW PACKAGES

In response to concerns expressed by many licensees and discussion with the EDO on this subject, I am requesting that the following action be implemented on all future packages submitted for CRGR review.

A new summary section should be included in bulletins and generic letters considered by CRGR to clearly identify if a backfit is involved and if so, how the backfit is justified, i.e., necessary for adequate protection, necessary to bring the facility into compliance, or cost-justified safety enhancement. Examples of such summary statements are provided in Enclosures 1, 2 and 3. We will compile further examples and make them available in the near future.

Consistent with the type of backfit, an analysis should be included in the CRGR review package that justifies the identified backfit as follows:

1. For cost-justified safety enhancements, the regulatory analyses and other information already called for (and being provided) under current practice should be sufficient.
2. For compliance issues, an evaluation is needed which identifies the objectives of and reasons for the modification and the basis for invoking the compliance exception. The analysis needs to connect the requested action to a bonafide NRC regulatory requirement and a previously approved implementing staff position, if one exists. Note: compliance exceptions should be limited to cases of error or omission in implementing current requirements; new or modified interpretations of requirements should not fall within this exception, and should be addressed under one of the other categories. Examples of evaluations for compliance issues are provided in Enclosures 4 and 5.
3. Similarly, for adequate protection issues an evaluation identifying the objectives of and reasons for the backfit and the basis for invoking the adequate protection exception is needed.

In discussing proposed actions with the CRGR, a change is being requested in how staff presentations are conducted. Presentations should focus on the basis and justification for the request under the backfit rule as well as the technical subject matter. This will make more effective use of the time available for review of each issue.

Original Signed by:
E. L. Jordan

Edward L. Jordan, Chairman
Committee to Review Generic
Requirements

Enclosures:

1. Example Summary Statement - Cost Justified Enhancement
2. Example Summary Statement - Compliance
3. Example Summary Statement - Compliance
4. Example Evaluation - Compliance
5. Example Evaluation - Compliance

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EXAMPLE SUMMARY STATEMENT - COST-JUSTIFIED ENHANCEMENT

Pending Generic Letter on GI-70 and GI-94

A section will be included entitled, Backfit Discussion.

For GI-70 the actions proposed by the NRC staff to improve the reliability of PORVs and block valves, as identified in Section 3 of Enclosure A, represent new staff positions for some licensees and CP holders, and this request is considered a backfit in accordance with NRC procedures. This backfit is a cost-justified safety enhancement. Therefore, a backfit analysis of the type described in 10 CFR 50.109(a)(3) and 10 CFR 50.109(c) was performed and a determination was made that there will be a substantial increase in overall protection of the public health and safety and that the costs are justified in view of this increased protection. The analysis and determination will be made available in the Public Document Room with the minutes of the 167th and 168th meetings of the Committee to Review Generic Requirements.

It is noted that most of the recommended actions for GI-70 may already have been implemented by those plants that have received operating licenses in recent years. This would, therefore, represent less of a backfit for newer PWR plants than for older PWR plants that currently do not include PORVs and block valves in the ASME Section XI Inservice Testing Program and do not have technical specifications for PORVs and block valves or that operate with the block valves closed due to leaking PORVs.

For GI-94, the actions proposed by the NRC staff to improve the availability of the low-temperature overpressure protection (LTOP) system, as identified in Section 3 of Enclosure B, represent a new interpretation of existing requirements for some licensees and CP holders, and this request is considered a backfit in accordance with NRC procedures. This backfit is a cost-justified safety enhancement. Therefore, a backfit analysis of the type described in 10 CFR 50.109(a)(3) and 10 CFR 50.109(c) was performed and a determination was made that there will be a substantial increase in overall protection of the public health and safety and that the costs are justified in view of this increased protection. The analysis and determination will be made available in the Public Document Room with the minutes of the 167th and 168th meetings of the Committee to Review Generic Requirements.

NOTE: In this example the backfit discussion is divided into two parts because GI-70 represented an additional staff positions whereas GI-94 represented a new interpretation of existing requirements.

EXAMPLE SUMMARY STATEMENT - COMPLIANCE

NRC Bulletin 88-01: Defects in Westinghouse Circuit Breakers

A new section would be added entitled, Backfit Discussion.

The actions requested in this bulletin represent new staff positions and this request is considered a backfit in accordance with NRC procedures. Because established regulatory requirements exist but were not satisfied, this backfit is to bring facilities into compliance with existing requirements. Therefore, a full backfit analysis was not performed. An evaluation of the type discussed in 10 CFR 50.109(a)(6) was performed, including a statement of the objectives of and reasons for the modification and the basis for invoking the compliance exception. It will be made available in the Public Document Room with the minutes of the 128th meeting of the Committee to Review Generic Requirements.

EXAMPLE SUMMARY STATEMENT - COMPLIANCE

IE Compliance Bulletin No. 86-01: Minimum Flow Logic Problems That Could Disable RHR Pumps

A new section would be added entitled, Backfit Discussion.

The actions requested in this bulletin represent new staff positions and thus, this request is considered a backfit in accordance with NRC procedures. Because established regulatory requirements exist but were not satisfied, this backfit is to bring facilities into compliance with existing requirements. Therefore, a full backfit analysis was not performed. An evaluation of the type discussed in 10 CFR 50.109(a)(6) was performed, including a statement of the objectives of and reasons for the modification and the basis for invoking the compliance exception. It will be made available in the Public Document Room with the minutes of the _____ meeting of the Committee of Review Generic Requirements.

Note: This example is for illustration only. There was not actually a CRGR meeting on this bulletin.

EXAMPLE EVALUATION - COMPLIANCE

NRC Bulletin 88-01: Defects in Westinghouse Circuit Breakers

Objectives of Backfit

The objective of this action is to ensure that certain Westinghouse circuit breakers are free of manufacturing defects that could impair their reliability or performance in safety-related applications.

Reasons for Backfit

As discussed in the bulletin, installed circuit breakers may contain defects. Thus, inspection and repair (as appropriate) are necessary to find and eliminate any such defects and to assure the level of performance and reliability previously assumed in the licensing bases.

Basis for Invoking Compliance Exception

Reliability and quality assurance provisions applicable to protection systems and to welds in circuit breakers installed in safety-related applications are discussed in Criteria IX, X, XIV and XVI of Appendix B to 10 CFR Part 50. Inherent in these provisions is that protection systems should be reliable, welding should be controlled to preclude defects that could adversely affect performance, the inspection status should be known, and known defects should be corrected. These provisions have been applied in the licensing bases of power reactors.

As discussed in the bulletin there have been recent reports of weld failures in certain Westinghouse circuit breakers. The weld failures can affect the breaker performance. Manufacturing/quality assurance inadequacies have allowed the defects to progress to installed breakers and the status of welds in installed breakers is uncertain. This situation is contrary to the conditions inherent in current requirements, as discussed above, and thus represents a case of error or omission in implementing current requirements.

Westinghouse subsequently issued a technical bulletin to address the weld failures and the NRC has found that it adequately addresses concerns with these failures. The NRC has determined that inspection and repair (as appropriate) are needed to ensure that installed breakers are free from manufacturing defects and, thus, will have the performance and reliability margins assumed in the licensing bases. Since this inspection was not previously required, this request is considered a backfit. Because established regulatory requirements exist but were not satisfied and no new interpretations or clarifications are involved, this backfit is to bring facilities into compliance with existing requirements.

EXAMPLE EVALUATION - COMPLIANCE

IE Compliance Bulletin No. 86-01: Minimum Flow Logic Problems that Could Disable RHR Pumps

Objectives of Backfit

The objective of this action is to ensure that emergency core cooling systems in boiling water reactors are free of design errors that could render them vulnerable to single failures.

Reasons for Backfit

As discussed in the bulletin, reported single failure vulnerabilities may exist in the emergency core cooling systems for boiling water reactors. Thus, review, evaluation and corrective action (as appropriate) are necessary to find and eliminate any such problems and to assure the redundancy assumed in the licensing bases.

Basis for Invoking the Compliance Exception

GDC 35 of 10 CFR Part 50, Appendix A, and 10 CFR 50.46(d) discuss single failure requirements for emergency core cooling systems. These provisions have been made applicable to all power reactors (for example, in the application of 10 CFR 50.46(d) to all plants in 1974).

As discussed in the bulletin, a design problem has been identified at some plants that could allow a single failure, if not recognized and corrected by operator action, to disable all LPCI (RHR) pumps following a loss-of-coolant accident. The condition could exist at other plants. This situation is contrary to the requirement discussed above, and thus represents a case of error or omission in implementing current requirements.

The NRC has determined that examination (and correction, as appropriate) will be needed to ensure that plants are free of the identified problem. Since this action was not previously required, this request is considered a backfit. Because established regulatory requirements exist but were not satisfied and no new interpretations or clarifications are involved, this backfit is to bring facilities into compliance with existing requirements.

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