

U. S. NUCLEAR REGULATORY COMMISSION  
NRC MANUAL  
TRANSMITTAL NOTICE

2

CHAPTER NRC-0514 NRC PROGRAM FOR MANAGEMENT OF PLANT-SPECIFIC  
BACKFITTING OF NUCLEAR POWER PLANTS

**SUPERSEDED:**

**TRANSMITTED:**

	Number	Date
Chapter	_____	_____
Page	_____	_____
	_____	_____
Appendix	_____	_____

	Number	Date
TN	0500-28	_____
Chapter	NRC-0514	8/26/88
Page	_____	_____
	_____	_____
Appendix	NRC-0514	8/26/88

**REMARKS:**

This new chapter and appendix establish responsibilities, requirements, and guidance for NRC implementation of provisions relating to plant-specific backfitting.

U.S. NUCLEAR REGULATORY COMMISSION  
NRC MANUAL

Volume: 0000 General Administration  
Part : 0500 Health and Safety

AEOD

---

CHAPTER 0514 NRC PROGRAM FOR MANAGEMENT OF PLANT-SPECIFIC  
BACKFITTING OF NUCLEAR POWER PLANTS

---

0514-01 COVERAGE

011 This chapter establishes the requirements and guidance for NRC staff implementation of 10 CFR 50.109 and the provisions of 10 CFR 50 Appendix O, 10 CFR 50.54(f), and 10 CFR 2.204, relating to plant-specific backfitting. Staff requirements and guidance for implementing the provisions of 10 CFR 50.109 pertaining to rules and other generic backfitting are beyond the scope of this chapter. Pertinent requirements and guidance for generic backfitting are contained in the CRGR Charter. Test and research reactor licensees are not covered by the provisions of the chapter.

012 This chapter defines the objectives, authorities, and responsibilities and establishes basic requirements for actions to be taken in instances where the NRC staff imposes new plant-specific regulatory staff positions on a nuclear power plant licensee.<sup>1</sup> This practice is commonly referred to as "backfitting" and for the purposes of this chapter is defined as the modification of or addition to systems, structures, components, or design of a facility; or the procedures or organization required to design, construct or operate a facility: any of which may result from a new or amended provision in the Commission rules or the imposition of a regulatory staff position interpreting the Commission rules that is either new or different from a previously applicable staff position. It should be clearly understood that backfits are expected to occur and are a part of the regulatory process to assure and improve the safety of nuclear power plants. However, it is important for sound and effective regulation that backfitting be conducted in a controlled process. Plant-specific backfitting is different from generic backfitting in that the former involves the imposition on a licensee of positions unique to a particular plant, whereas generic backfitting involves the imposition of the same or similar positions on two or more plants. This chapter governs those plant-specific backfits communicated to the licensees or identified by the licensees after July 6, 1988.

013 The management of plant-specific backfitting, for which guidance is provided in this document, does not relieve licensees from achieving and

---

<sup>1</sup>See Section 05 of this chapter for a definition of "licensee."

Approved: August 26, 1988

maintaining adequate protection of the public health and safety<sup>2</sup> or complying with the Commission's regulations, orders, license, or written licensee commitment. The management process is intended to provide disciplined NRC review of new or changed positions prior to imposing them.

The plant-specific backfit management process will enhance regulatory stability by assuring that changes in regulatory staff positions are in fact required to ensure that the facility provides adequate protection to public health and safety or to provide a substantial increase in the overall protection of the public health and safety or common defense and security. Such plant-specific backfitting is entirely proper given the agency's responsibility to ensure an adequate level of protection and the agency's authority to improve safety beyond this level.

#### 0514-02 OBJECTIVES

021 It is the overall objective of this program to assure that plant-specific backfitting of nuclear power plants is justified and documented and to specify that the Executive Director for Operations is responsible for the proper implementation of the backfit process.

022 The specific objectives of this program are (a) to ensure that facilities provide adequate protection of the public health and safety; and (b) to allow for substantial improvements in the levels of protection of public health and safety beyond adequacy while avoiding any unwarranted burdens on the NRC, public or licensees in implementing backfits.

023 The program should assure to the extent possible that backfits to be issued will in fact contribute effectively and significantly to the health and safety of the public or the common defense and security. This objective is attained by assuring that plant-specific backfits will be communicated to the licensee only if necessary to provide an adequate level of safety, or after required regulatory analyses are completed and approved as described in Section 0514-042 of this chapter. The backfit and supporting regulatory analyses are approved by the appropriate Office Director or Deputy Director, or Regional Administrator or Deputy Regional Administrator, and forwarded to the Executive Director for Operations before the backfit and appropriate supporting analysis are communicated to the licensee.

#### 0514-03 RESPONSIBILITIES AND AUTHORITIES

031 The Executive Director for Operations (EDO) is responsible to the Commission for plant-specific backfit actions. The EDO may review and modify any plant-specific backfit decision at his or her initiative or at the request

---

<sup>2</sup> Adequate protection of the public health and safety means the same as no undue risk and reasonable assurance of not endangering public health and safety. In NRC practice these standards are interchangeable.

of a licensee in accordance with Section 044. The EDO may authorize deviations from this chapter when the EDO finds that such action is in the public interest and the deviation otherwise complies with the applicable regulations.

**032** The Director, Office for Analysis and Evaluation of Operational Data (AEOD), shall assure that process controls for overall agency management and oversight of the plant-specific backfit process are developed and maintained and shall coordinate the implementation of procedures within the other Offices and Regions. These process controls shall include specific procedures, training, progress monitoring systems, and provisions for obtaining and evaluating both staff and industry views on the conduct of the backfit process. The Director, AEOD, is also responsible for assuring that each licensee is informed of the existence and structure of the NRC program described in this chapter. The Director, AEOD, shall assure that substantive changes in the chapter and related procedures are communicated to the licensees.

**033** The Director, Office of Nuclear Reactor Regulation (NRR), shall assure that an overall procedure for managing plant-specific backfitting that involves positions taken by NRR is developed, implemented, and maintained, in accordance with the chapter. The overall procedure shall be coordinated with AEOD and approved by the EDO. The Director, NRR, shall consult and coordinate with Regional Administrators and the Office of Nuclear Material Safety and Safeguards, as appropriate, to develop resolutions of proposed plant-specific backfits in program areas for which NRR has responsibility.

For backfits within NRR's program area of responsibility which are proposed by NRR staff, the Director or Deputy Director, NRR, without further delegation, shall approve the regulatory analysis prior to communicating the backfit and analysis to the licensee. For all backfits within the NRR program area of responsibility which are appealed by a licensee, the Director, NRR, shall make the decision on imposition of the backfit. The decision is subject to EDO review under Section 0514-031. The Director, NRR, shall assure NRR staff performance in accordance with this chapter.

**034** The Director, Office of Nuclear Material Safety and Safeguards (NMSS), shall assure that an overall procedure for managing plant-specific backfitting that involves positions taken by NMSS is developed, implemented, and maintained, in accordance with this chapter. The overall procedure shall be coordinated with AEOD and approved by the EDO. The Director, NMSS, shall consult and coordinate with Regional Administrators and the Director of the Office of Nuclear Reactor Regulation, as appropriate, to develop resolutions of proposed plant-specific backfits in program areas for which NMSS activities may affect reactor plant licensees.

For backfits within the NMSS program area of responsibility which are proposed by NMSS staff, the Director or Deputy Director, NMSS, without further delegation, shall approve the regulatory analysis prior to communicating the backfit and analysis to the licensee. For all backfits within the NMSS program area of responsibility which are appealed by a licensee, the Director, NMSS, shall make the decision on imposition of the backfit. The decision is subject to EDO review under Section 0514-031. The Director, NMSS, shall assure NMSS staff performance in accordance with this chapter.

035 Regional Administrators shall assure that an overall procedure for managing plant-specific backfitting that involves positions taken by a Region in any program area for which the Region has been delegated authority, is developed, implemented, and maintained, in accordance with the chapter. The overall procedure shall be coordinated with AEOD and approved by the EDO.

Regional Administrators shall consult and coordinate with the Directors of the Offices of Nuclear Reactor Regulation and Nuclear Material Safety and Safeguards, as appropriate, to identify issues and develop resolutions of proposed plant-specific backfits where such backfitting would result from positions taken by the Region.

For backfits proposed by the Region, the Regional Administrator or Deputy Regional Administrator, without further delegation, shall approve the regulatory analysis prior to communicating the backfit and analysis to the licensee. For backfits proposed by the Region and appealed by the licensee, the Administrator is responsible for the conduct of the appeal process within the Region; however, if agreement cannot be reached at the Regional level, the decision on imposition of the backfit shall be made by the Director of the program office having responsibility for the program area relevant to the backfit. The decision is subject to EDO review under Section 0514-031. Each Regional Administrator shall assure Regional staff performance in accordance with this chapter.

036 The Directors, Offices of Nuclear Reactor Regulation, and Nuclear Material Safety and Safeguards, and Regional Administrators, shall approve regulatory analyses initiated by their staff members, who propose backfits within other program office areas of responsibility which have been delegated to them for implementation and decision authority, prior to communicating the backfit and analysis to the licensee.

037 The Director, Office of Administration and Resources Management, shall, in coordination with the Office Directors, and Regional Administrators, develop and maintain the overall NRC data base management system identified and described in Section 046 of this chapter.

038 NRC staff positions may be identified as potential backfits either by NRC staff or by persons who are not members of the NRC staff. Such identifications will be considered by the Office Director/Regional Administrator having responsibility to develop staff positions on the matter at issue. This Office Director/Regional Administrator will be responsible to make the determination as to whether the staff position is a backfit and whether the proposed backfit should be imposed on the licensee.

#### 0514-04 BASIC REQUIREMENTS

041 Information Requests Pursuant to 10 CFR 50.54(f). Paragraph 10 CFR 50.54(f) authorizes the NRC to require its licensees to provide additional safety information to enable the Commission to determine whether or not a license should be modified, suspended, or revoked. This paragraph (as amended in 50 FR 38097) requires the NRC to justify such information requests by a

supporting analysis which finds that the burden to be imposed is justified in view of the potential safety significance of the issue to be addressed in the requested information. The exceptions to this requirement are as follows:

- a. No finding is required whenever there is reason to believe that the public health and safety may not be adequately protected and safety information is needed to decide if this is the case and to take any necessary corrective action.
- b. Concerning the review of applications for licenses or amendments, or the conduct of inspection activities, for plants under construction, no finding will be necessary if the staff seeks information of a type routinely sought as a part of the standard procedures concerning the review of applications. If the request is not part of routine licensing review (for example, if it seeks to gather information pursuant to development of a new staff position), a staff analysis of the reasons for the request and a finding must be prepared and approved prior to issuance.
- c. Concerning licensing review or inspection activities for operating plants, information requests seeking to verify licensee compliance with the current licensing basis for the facility are exempt from the necessity to prepare the reason or reasons for the request and to make a finding. Requests for information to determine compliance with existing facility requirements including fact-finding reviews, inspections and investigations of accidents or incidents, usually are not made pursuant to Section 50.54(f), nor are such requests normally considered within the scope of the backfit rule or this chapter.

The Directors of NRR and NMSS and Regional Administrators shall develop internal office procedures to ensure that there is a rational basis for all information requests not clearly excepted from the finding, whether or not it is clear that backfit action would result from staff evaluation of the information supplied by the licensee. The request must be evaluated to determine whether the burden imposed by the information request is justified in view of the potential safety significance of the issue to be addressed. The information request and the staff evaluation must be approved by the cognizant Office Director or Regional Administrator prior to transmittal of the request for information to a licensee.

NRC staff evaluations of the necessity for an information request shall include at least the following elements:

- a. A problem statement that describes the need for the information in terms of potential safety benefit.
- b. The licensee actions required and the cost to develop a response to the information request.
- c. An anticipated schedule for NRC use of the information.

Approved: August 26, 1988

042 Identifying Plant-Specific Backfits. The NRC staff shall be responsible for identifying proposed plant-specific backfits as defined by Section 05 of the chapter. The staff at all levels will evaluate any proposed plant-specific position with respect to whether or not the position qualifies as a proposed backfit pursuant to Section 05 of this chapter. No staff position should be communicated to a licensee unless the NRC official communicating that position has ascertained whether or not the position is to be identified as a backfit. NRC Appendix 0514 provides information to help in identifying backfits arising from selected staff activities. When a staff proposed position is identified as a backfit the staff should determine expeditiously whether the backfit is needed to ensure adequate protection of the public health and safety or to comply with Commission rules or orders, the license, or written licensee commitments. If, and only if the backfit does not meet this test, the appropriate staff office should proceed promptly with the preparation of a regulatory analysis (Section 043) for approval in accordance with this chapter.

Economic cost can never be a consideration either in defining what is an adequate level of protection or in ensuring that an adequate level of protection is achieved and maintained.

The staff may, at any point in the development of the regulatory analysis, decide that further analysis is likely to show either that the proposed safety benefit is not likely to be substantial additional overall protection, or that the direct and indirect costs of implementation are not likely to be justified. In this case, the issue may be closed, with appropriate notice sent to all parties and recorded in the recordkeeping system described in Section 046.

When (a) a staff proposed position is necessary to bring a facility into compliance with a license or the rules or orders of the Commission (Sections 052-a, 053-a), or into conformance with written commitments by the licensee (Sections 052-a, 053-b), or (b) the Director of NRR or NMSS determines that imposition of a backfit is necessary to ensure that the facility provides adequate protection to public health and safety, no regulatory analysis is required. Instead, the appropriate Director/Regional Administrator is to provide a documented evaluation to support the action taken.

The evaluation shall include a statement of the objectives of the reasons for the modification and the basis for invoking the exception. In the case of a backfit needed to assure that the facility provides adequate protection, the documented evaluation shall also include an analysis to document the safety significance and appropriateness of the action taken. Should it be necessary or appropriate for the Commission to prescribe a way to achieve adequate protection, the evaluation can include a consideration of how costs contribute to selecting the solution among various acceptable alternatives. However, cost will not be a factor in determining what constitutes an adequate level of protection. Such an evaluation is to be issued with the backfit except that, when an immediately effective regulatory action is necessary, and the safety need is so urgent that full documentation cannot be completed, the documentation may follow the backfit.

A proposed staff position which is not identified by the NRC staff as a backfit position may be claimed to be a backfit position by a licensee. The

staff will promptly consider a licensee claim of backfit to determine if the claimed backfit qualifies as such in accordance with Section 05 of this chapter. Licensees identifying such items should send a written claim of backfit (with appropriate supporting rationale) to the Office Director or Regional Administrator of the NRC staff person who issued the position with a copy to the EDO. If the NRC staff determination is that the issue is a backfit, the appropriate staff office should proceed immediately with the preparation of any required regulatory analysis for approval in accordance with this chapter.

If the determination is that the proposed staff position is not a backfit, the appropriate staff office shall document the basis for the decision and transmit it together with any documented evaluation required by this section to the licensee. In any case, the appropriate Office Director/Regional Administrator shall report to the EDO and inform the licensee, within 3 weeks after receipt of the written backfit claim, of the results of the determination and the plan for resolving the issue.

When a licensee is informed that a claimed backfit is, in the judgment of the NRC, not a backfit, the licensee may appeal this determination as described in Section 044 of this chapter.

**043 Regulatory Analysis.** Positions identified as plant-specific backfits requiring the regulatory analysis in this section shall be transmitted to licensees only after a determination that there is a substantial increase in the overall protection of the public health and safety or the common defense and security to be derived from the backfit, and that the direct and indirect costs of implementation for that facility are justified in view of the increased protection. The proposed backfit and supporting regulatory analysis must be approved by the appropriate Program Office Director or Deputy Director, or Regional Administrator or Deputy Regional Administrator and forwarded to the EDO before the backfit and its supporting regulatory analysis are transmitted to the licensee.

The regulatory analysis shall generally conform to the directives and guidance of NUREG/BR-0058 and NUREG/CR-3568, which are the NRC's governing documents concerning the need for preparation of regulatory analyses. In preparing regulatory analyses under this section, the staff should note that the complexity and comprehensiveness of an analysis should be limited to that necessary to provide an adequate basis for decisionmaking among the alternatives available. The emphasis should be on simplicity, flexibility, and common sense, both in terms of the type of information supplied and in the level of detail provided. The following information and any other information relevant and material to the backfit shall be included in the regulatory analysis, as available and appropriate to the analysis:

- a. A statement of the specific objective that the proposed backfit is designed to achieve. This should also include a succinct description of the backfit proposed, and how it provides a substantial increase in overall protection.
- b. A general description of the activity that would be required by the licensee in order to complete the backfit.

- c. The potential safety impact of changes in plant design or operational complexity, including the relationship to proposed and existing regulatory requirements.
- d. Whether the proposed backfit is interim or final and, if interim, the justification for imposing the proposed backfit on an interim basis.
- e. A statement that describes the benefits to be achieved and the cost to be incurred. Information should be used to the extent that it is reasonably available, and a qualitative assessment of benefits may be made in lieu of the quantitative analysis where it would provide more meaningful insights, or is the only analysis practicable. This statement should include consideration of at least the following factors:
  - (1) The potential change in risk to the public from the accidental offsite release of radioactive material.
  - (2) The potential impact on radiological exposure of facility employees. Also consider the effects on other onsite workers, due both to installation of procedural or hardware changes and to the effects of the changes, for the remaining lifetime of the plant.
  - (3) The installation and continuing costs associated with the backfit, including the cost of facility downtime or the cost of construction delay.
  - (4) The estimated resource burden on the NRC associated with the proposed backfit and the availability of such resources.
- f. A consideration of important qualitative factors bearing on the need for the backfit at the particular facility, such as, but not limited to, operational trends, significant plant events, management effectiveness, or results of performance reports such as the Systematic Assessment of Licensee Performance.
- g. A statement affirming appropriate interoffice coordination related to the proposed backfit and the plan for implementation.
- h. The basis for requiring or permitting implementation on a particular schedule, including sufficient information to demonstrate that the schedules are realistic and provide adequate time for in-depth engineering, evaluation, design, procurement, installation, testing, development of operating procedures, and training of operators and other plant personnel, as appropriate. For those plants with approved integrated schedules, the integrated scheduling process can be used for implementing this step and the following two procedural steps.

- i. A schedule for staff actions involved in implementation and verification of implementation of the backfit, as appropriate.
- j. Importance of the proposed backfit considered in light of other safety-related activities underway at the affected facility.
- k. A statement of the consideration of the proposed plant-specific backfit as a potential generic backfit.

044 Appeal Process. The appeal processes described in this section are of two types, applied to two distinctly different situations:

- a. Appeal to an Office/Region to modify or withdraw a proposed backfit which has been identified, and for which a regulatory analysis has been prepared and transmitted to the licensee; or
- b. Appeal to an Office/Region to reverse a denial of a prior licensee claim either that a staff position, not identified by the NRC as a backfit, is one, or that a backfit which staff believes falls within one of the exceptions from the requirement for a regulatory analysis, does not.

In the first type of situation described, licensees should address an appeal of a proposed backfit to the Office Director or Regional Administrator whose staff proposed the backfit with a copy to the EDO. The appeal should provide arguments against the rationale for imposing a backfit as presented in the staff's regulatory analysis. The Office Director or Regional Administrator shall report to the EDO within 3 weeks after receipt of the appeal concerning the plan for resolving the issue. The licensee should also be promptly and periodically informed in writing regarding the staff plans. The decision of the Office Director on an appeal of plant-specific backfit may be appealed to the EDO unless resolution is achieved at a lower management level. The EDO shall promptly resolve the appeal and shall state his reasons therefor. Summaries of all appeal meetings shall be prepared promptly, provided to the licensee, and placed in appropriate Public Document Rooms. During the appeal process, primary consideration shall be given to how and why the proposed backfit provides a substantial increase in overall protection and whether the associated costs of implementation are justified in view of the increased protection. This consideration should be made in the context of the regulatory analysis as well as any other information that is relevant and material to the proposed backfit.

In the second type of appeal situation the appeal should be addressed to, and will be decided by, the Director of the program office having responsibility for the program area relevant to the staff position, unless resolution is achieved at a lower management level. A copy of the appeal should also be sent to the Executive Director for Operations. The appeal should take into account the staff's evaluation, the licensee's response, and any other information that is relevant and material to the backfit determination. The EDO may review and may modify a decision either at his or her own initiative or at the request of the licensee. If the licensee appeals to the EDO, the EDO

shall promptly resolve the appeal and shall state the reasons therefor. Backfit claims and resultant staff determinations that are reevaluated in response to an appeal, and that are again determined by the NRC not to be backfits, or are excepted from the requirement for a regulatory analysis, are not to be treated further in the context of this chapter. Such matters are to be dealt with within the normal licensing or inspection appeal process and are not subject to the requirements of this chapter.

045 Implementation of Backfits. Following approval of any required regulatory analysis by the appropriate Office Director or Regional Administrator, review if any by the EDO, and issuance of the backfit to the licensee, the licensee will either implement the backfit or appeal it. After an appeal and subsequent final decision by the appropriate Office Director or EDO, the licensee may elect to implement a backfit resulting from the decision. If the licensee does not elect to implement the backfit, it may be imposed by Order of the appropriate Office Director.<sup>3</sup>

Implementation of plant-specific backfits will normally be accomplished on a schedule negotiated between the licensee and the NRC. Scheduling criteria should include the importance of the backfit relative to other safety related activities underway, or the plant construction or maintenance planned for the facility, in order to maintain high quality construction and operations. For plants that have integrated schedules, the integrated scheduling process can be used for this purpose.

A staff-proposed backfit may be imposed by Order<sup>3</sup> prior to completing any of the procedures set forth in this chapter provided the NRC official authorizing the Order determines that immediate imposition is necessary to provide adequate protection to the public health and safety or the common defense and security. In such cases, the EDO shall be notified promptly of the action and a documented evaluation as described in Section 042 performed, if possible, in time to be issued with the order.

If "immediate imposition" is not necessary, staff proposed backfits shall not be imposed, and plant construction, licensing action, or operation shall not be interrupted or delayed by NRC actions, during the staff's evaluation and backfit transmittal process, or a subsequent appeal process, until final action is completed under this chapter.

046 Recordkeeping and Reporting. The proposing Headquarters Office or Regional Office shall administratively manage each proposed plant-specific backfit using one agency recordkeeping system that provides for prompt retrieval of current status, planned and accomplished schedules, and ultimate disposition. The system shall provide reference to all documents issued or received by NRC staff relative to a plant-specific backfit, including requests, positions, statements, and summary reports. Access to make changes to the system will be limited to those designated within each Office and Region. Specific data required will include, but are not limited to:

---

<sup>3</sup>Once an Order is issued, whether or not it is immediately effective, this chapter no longer applies and appeals are governed by the procedures in 10 CFR Part 2, Subpart B.

- a. Licensee and facility affected.
- b. Whether a backfit is identified by staff or by a licensee.
- c. Identification and description of the document that either transmits a staff-identified backfit or a licensee request for consideration of a licensee-identified backfit.
- d. Substance of the backfit issue.
- e. In the case of a licensee-identified backfit, the dates (predicted and completed) that determinations are made as to whether or not a staff position qualifies as a backfit, the substance of the determination, and the organization and official responsible for making the determination.
- f. A brief description of what action is pending, and the officials responsible to complete the action.
- g. Action closing date, to include a description of licensee or staff action and date of agreement or order to implement; responsible officials and organization for each action.

047 Exceptions. Nothing in this chapter shall be interpreted as authorizing or requiring the staff to make plant-specific backfits or assessments for generic backfits that are, or have been, subject to review by the CRGR and approval by the EDO, or for generic backfits approved prior to November 1981, unless the EDO determines that significant plant-specific issues were not considered during the prior reviews or the EDO authorizes a deviation under Section 031.

048 References.

- a. NUREG/BR-0058, Rev. 1, May 1984, "Regulatory Analysis Guidelines of the U.S. Nuclear Regulatory Commission"
- b. NUREG/CR-3568, December 1983, "A Handbook for Value-Impact Assessment"
- c. NUREG/CR-3971, October 1984, "A Handbook for Cost Estimating"
- d. Revision of Backfit Rule, Code of Federal Regulations, 53 FR 20603 (June 6, 1988)

0514-05 DEFINITIONS

051 Licensee. Except where defined otherwise, the word licensee as used in this chapter shall mean that person that holds a license to operate a nuclear power plant, or a construction permit to build a nuclear power plant, or a Preliminary Design Approval, Final Design Approval, or Design Certification for a Standardized Plant Design.

**052 Plant-Specific Backfit.** Backfitting is defined as the modification of or addition to systems, structures, components, or design of a facility; or the design approval or manufacturing license for a facility; or the procedures or organization required to design, construct or operate a facility; any of which may result from a new or amended provision in the Commission rules or the imposition of a regulatory staff position interpreting the Commission rules that is either new or different from a previously applicable staff position after certain specified dates. Backfitting is "plant-specific" when it involves the imposition of a position that is unique to a particular plant.

It should be noted that to be a plant-specific backfit a staff position must meet conditions involving both (a) the substance of the elements of a proposed staff position and (b) the time of the identification of the staff position:

- a. A staff position may be a proposed backfit if it would cause a licensee to change the design, construction or operation of a facility from that consistent with already applicable regulatory staff positions. Applicable regulatory staff positions are described in Section 053.
- b. A staff position as described in (a) above is a proposed backfit if it is first identified to the licensee after certain important design, construction or operation milestones, involving NRC approvals of varying kind, has been achieved. Those times after which a new or revised staff position will be considered a backfit are as follows:
  - (1) After the date of issuance of the construction permit for the facility (for facilities having construction permits issued after May 1, 1985);
  - (2) After 6 months before the date of docketing of the OL application for the facility (for facilities having construction permits issued before May 1, 1985);
  - (3) After the date of issuance of the operating license for the facility (for facilities having an operating license on May 1, 1985);
  - (4) After the date of issuance of the design approval under 10 CFR 50, Appendix M, N or O.

**NOTE:** The EDO directives embodied in chapter NRC-0514 are effective as of July 6, 1988.

**053 Applicable Regulatory Staff Positions.** Applicable regulatory staff positions are those already specifically imposed upon or committed to by a licensee at the time of the identification of a plant-specific backfit, and are of several different types and sources:

- a. Legal requirements such as in explicit regulations, orders, plant licenses (amendments, conditions, technical specifications). Note

that some regulations have update features built in, as for example, 10 CFR 50.55a, Codes and Standards. Such update requirements are applicable as described in the regulation.

- b. Written commitments such as contained in the FSAR, LERs, and docketed correspondence, including responses to Bulletins, responses to Generic Letters, Confirmatory Action Letters, responses to Inspection Reports, or responses to Notices of Violation.
- c. NRC staff positions<sup>4</sup> that are documented, approved, explicit interpretations of the more general regulations, and are contained in documents such as the SRP, Branch Technical Positions, Regulatory Guides, Generic Letters, and Bulletins; and to which a licensee or an applicant has previously committed to or relied upon. Positions contained in these documents are not considered applicable staff positions to the extent that staff has, in a previous licensing or inspection action, tacitly or explicitly excepted the licensee from part or all of the position.<sup>5</sup>

---

<sup>4</sup>Requirements may be imposed by rule or order. Staff interpretations such as examples of acceptable ways to meet requirements are not requirements in and of themselves.

<sup>5</sup>Imposition of a staff position from which a licensee has previously been excepted is a backfit.

Approved: August 26, 1988

**CONTENTS**

<b>Guidance for Making Backfit Determinations</b>		<u><b>Page</b></u>
<b>A.</b>	<b>General.....</b>	<b>1</b>
<b>B.</b>	<b>Licensing.....</b>	<b>1</b>
	<b>1. Standard Review Plan.....</b>	<b>1</b>
	<b>2. Regulatory Guides.....</b>	<b>2</b>
	<b>3. Plant-Specific Orders.....</b>	<b>3</b>
<b>C.</b>	<b>Inspection and Enforcement.....</b>	<b>3</b>
	<b>1. Inspections.....</b>	<b>3</b>
	<b>2. Notice of Violations.....</b>	<b>4</b>
	<b>3. Bulletins.....</b>	<b>4</b>
	<b>4. Reanalysis of Issues.....</b>	<b>4</b>

**Guidance for Making Backfit Determinations**

**A. General**

In this section selected regulatory activities and documents are discussed in order to enable members of the NRC staff and the regulated industry to better understand the conditions under which a staff position may be viewed as a plant-specific backfit. It is important to understand that the necessity for making backfit determinations should not inhibit the normal informal dialogue between the technical reviewer or inspector and the licensee. The intent of this process is to manage backfit imposition, not to quell it. The discussion in this appendix is intended to aid in identifying backfits in accordance with the principles and the practices that should be implemented by all staff members. This appendix is not intended to be an exhaustive, comprehensive workbook in which can be found a parallel example for each situation that may arise. As is evident from the definitions in Section 05 of this chapter, a plant-specific backfit has the elements of a change from an already applicable staff position where an applicable staff position is defined as that established before certain defined milestones in the affected plant's licensing history. There will be some judgment necessary to determine whether a staff position would cause a licensee to change the design, construction or operation of a facility. In making this determination, the fundamental question is whether the staff's action is directing, telling, or coercing, or is merely suggesting or asking the licensee to consider a staff proposed action.

Actions proposed by the licensee are not backfits under this chapter even though such actions may result from normal discussions between staff and licensee concerning an issue, and even though the change or additions may meet the definitions of Section 0514-052 and 0514-053.

**B. Licensing**

1. **Standard Review Plan (SRP)** - The SRP delineates the scope and depth of staff review of licensee submittals associated with various licensing activities. It is a definitive NRC staff interpretation of measures which, if taken, will satisfy the requirements of the more generally stated, legally binding body of regulations, primarily found in Title 10 CFR. Since October 1981, changes to the SRP are to have been reviewed and approved through a generic review process involving the Committee to Review Generic Requirements (CRGR), and the extent to which the changes apply to classes of plants is defined. Consequently, application of a current SRP in a specific operating license (OL) review generally is not a plant-specific backfit, provided the SRP was effective 6 months prior to the start of the OL review. Asking an applicant for an operating license questions to clarify staff understanding of proposed actions, in order to determine whether the actions will meet the intent of the SRP, is not considered a backfit.

On the other hand, using acceptance criteria more stringent than those contained in the SRP or taking positions more stringent than

in addition to those specified in the SRP, whether in writing or orally, is a plant-specific backfit. During meetings with the licensee, staff discussion or comments regarding issues and licensee actions volunteered which are in excess of the criteria in the SRP generally do not constitute plant-specific backfits; however, if the staff implies or suggests that a specific action in excess of already applicable staff positions is the only way for the staff to be satisfied, the action is considered a plant-specific backfit whether or not the licensee agrees to take such action. However, the staff should recognize that a verbally implied or suggested action should not be accepted by a licensee as an NRC position of any kind, backfit or not; only written and authoritatively approved position statements should be taken as NRC positions.

Application of an SRP to an operating plant after the license is granted generally is considered a backfit unless the SRP was approved specifically for operating plant implementation and is applicable to such operating plant. It is important to note, however, that in order to issue an amendment to a license, there must be a current finding of compliance with regulations applicable to the amendment. As a specific example, review of a plant owner's application for a license amendment to authorize installation and operation of a new reactor core, commonly called a "reload application," may necessitate review of new fuel designs or new thermal-hydraulic correlations and associated operating limits. Such changes that are clearly advances in design or operation may involve new or unreviewed safety issues, and may warrant review to SRP criteria which were approved subsequent to initial license issuance to the licensee. This is not considered a backfit. However, such review to newer SRP revisions is not necessarily required to determine current compliance with regulations. Licensee-proposed revisions in design or operation that raise staff questions only about potential reduced margins of safety as defined in the basis for any technical specification should be reviewed by reanalysis of the same accident sequences and associated assumptions as analyzed in the FSAR for the initial license issuance.

During reload reviews, staff-proposed positions with regard to technical matters not related to the changes proposed by a licensee shall be considered backfits.

2. Regulatory Guides - As part of the generic review process pursuant to the CRGR Charter, it is decided which plants or groups of plants should be affected by new or modified Regulatory Guide provisions. Such implementation is therefore not governed by the plant-specific backfit procedures. However, any staff proposed plant-specific implementation of a Regulatory Guide provision, whether orally or in writing, for a plant not encompassed by the generic implementation determination is considered a plant-specific backfit. A staff action with respect to a specific licensee that expands on, adds to, or modifies a generically approved regulatory guide, such that the position taken is more demanding than intended in the generic positions, is a plant-specific backfit.

3. **Plant-Specific Orders** - An order issued to cause a licensee to take actions which are not otherwise applicable regulatory staff positions is a plant-specific backfit. As described in Section 0514-045 of this chapter, an order effecting immediate imposition of a backfit may be issued prior to completing any of the procedures set forth in this chapter provided that the appropriate Office Director determines that immediate imposition is necessary.

An order issued to confirm a licensee commitment to take specific action even if that action is in excess of previously applicable staff positions, is not a plant-specific backfit provided the commitment was not obtained by the staff with the expressed or implied direction that such a commitment was necessary to gain acceptance in the staff review process. Discussion or comments by the NRC staff identifying deficiencies observed, whether in meetings or written reports, do not constitute backfits. Definitive statements to the licensee directing a specific action to satisfy staff positions are backfits unless the action is an explicit and already applicable regulatory staff position.

**C. Inspection and Enforcement**

1. **Inspections** - NRC inspection procedures govern the scope and depth of staff inspections associated with licensee activities such as design, construction, and operation. As such, they define those items the staff is to consider in its determination of whether the licensee is conducting its activities in a safe manner. The conduct of inspections establishes no new staff positions for the licensee and is not a plant-specific backfit.

Staff statements to the licensee that the contents of an NRC inspection procedure are positions that must be met by the licensee constitute a plant-specific backfit unless the item is an applicable regulatory staff position. Discussion or comment by the NRC staff regarding deficiencies observed in the licensee conduct of activities, whether in meetings or in written inspection reports, do not constitute backfits, unless the staff suggests that specific corrective actions different from previous applicable regulatory staff positions are the only way to satisfy the staff. In the normal course of inspecting to determine whether the licensee's activities are being conducted safely, inspectors may examine and make findings in specific technical areas wherein prior NRC positions and licensee commitments do not exist. Examination of such areas and making findings is not considered a backfit. Likewise, discussion of findings with the licensee is not considered a backfit. If during such discussions, the licensee agrees that it is appropriate to take action in response to the inspector's findings, such action is not a backfit provided the inspector does not indicate that the specific actions are the only way to satisfy the staff. On the other hand, if the inspector indicates that a specific action must be taken, such action is a backfit unless it constitutes an applicable regulatory staff position. Further, if the licensee decides

to claim that the inspector's findings are a backfit, then the staff must decide whether they are a backfit under this chapter.

For example, if the licensee commits to ANSI-N18.7 in the SAR and the inspector finds the licensee's implementing procedures do not contain all the elements required by ANSI-N18.7, telling the licensee he must take action to include all the elements in the implementing procedures is not a backfit. If the inspector finds the licensee has included all the required elements of ANSI-N18.7, but has not included certain of the optional elements in the implementing procedures, inspector discussion with the licensee regarding the merits of including the optional elements is not a backfit. On the other hand, if the inspector tells the licensee that the implementing procedures must include any or all of the optional elements in order to satisfy the staff, inclusion of such elements is a backfit, whether or not agreed to by the licensee.

2. Notice of Violations (NOV) - a NOV requesting description of a licensee's proposed corrective action is not a backfit. The licensee's commitments in the description of corrective action are not backfits. A request by the staff for the licensee to consider some specific action in response to an NOV is not a backfit. However, if the staff is not satisfied with the licensee's proposed corrective actions and requests that the licensee take additional actions, those additional actions (whether requested orally or in writing) are a backfit unless they are an applicable regulatory staff position.

Discussions during enforcement conferences and responses to the licensee's requests for advice regarding corrective actions are not backfits; however, definitive statements to the licensee directing a specific action to satisfy staff positions are backfits, unless the action is an explicit applicable regulatory staff position.

3. Bulletins - Bulletins and resultant actions requested of licensees undergo the general review process pursuant to the CRGR Charter. Therefore, in general, it is not necessary to apply the plant-specific backfit process to the actions requested in a Bulletin. However, if the staff expands the action requested by a Bulletin during its application to a specific licensee, such expansion is considered a plant-specific backfit.
4. Reanalysis of Issues - Throughout plant lifetime, many individuals on the NRC staff have an opportunity to review the requirements and commitments incumbent upon a licensee. Undoubtedly, there will be occasions when a reviewer concludes the licensee's program in a specific area does not satisfy a regulation, license condition or commitment. In the case where the staff previously accepted the licensee's program as adequate, any staff specified change in the program would be classified as a backfit.

For example, in the case of an NTOL, once the SER is issued signifying staff acceptance of the programs described in the SAR, the licensee should be able to conclude that his commitments in the SAR satisfy the NRC requirements for a particular area. If the staff was to subsequently require that the licensee commit to additional action other than that specified in the SAR for the particular area, such action would constitute a backfit.

A somewhat different situation exists when the licensee has made a submittal committing to a specific course of action to meet an applicable position, and the staff has not yet responded, and therefore has not indicated that the commitment is or is not sufficient to meet the applicable position. Subsequent staff action, which must be taken within a reasonable time not delaying the applicant's implementation plans, to cause the licensee to meet the applicable regulatory staff position is not a backfit. If the licensee has moved ahead in the intervening time to implement that which the licensee proposed to do in its submittal and the staff has failed to provide a timely response, then the staff position may be considered a backfit. Thus, if a licensee has implemented a technical resolution intended to meet an applicable regulatory staff position, and staff for an extended period simply allows the licensee resolution to stand with tacit acceptance indicated by non-action on the part of NRC, then a subsequent action to change the licensee's design, construction, or operation is a backfit.