

NUCLEAR REGULATORY COMMISSION

10 CFR Chapter I

Regulatory Analysis Guidelines:  
Final Criteria for the Treatment of Individual  
Requirements in a Regulatory Analysis

AGENCY: Nuclear Regulatory Commission.

ACTION: Notice of Issuance.

SUMMARY: The Nuclear Regulatory Commission (NRC) is issuing its final criteria for the treatment of individual requirements in a regulatory analysis, because aggregating or “bundling” different requirements in a single regulatory analysis could potentially mask the inclusion of an individual requirement that is not cost-justified. As a result of these new criteria, the NRC will issue Revision 4 of its Regulatory Analysis Guidelines, NUREG/BR-0058 in the near future.

FOR FURTHER INFORMATION CONTACT: Brian J. Richter, Office of Nuclear Reactor Regulation, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001; telephone (301) 415-1978; e-mail [bjr@nrc.gov](mailto:bjr@nrc.gov).

SUPPLEMENTARY INFORMATION:

I. Background

The NRC usually performs a regulatory analysis for an entire rule in evaluating a proposed regulatory initiative to determine if the rule is cost-justified. External stakeholders from the nuclear power industry raised concerns that bundling different requirements in a single regulatory analysis can potentially mask the inclusion of an individual requirement when the net benefit from one of the requirements supports a second requirement that is not cost-justified.

In order to address this concern, the NRC published proposed criteria for the treatment of individual requirements in a regulatory analysis for comment on April 18, 2003 (68 FR 19162).

## II. Comments on the Proposed Criteria

After publishing its proposed criteria for the treatment of individual requirements in a regulatory analysis, the NRC received two sets of comments: one set from the Nuclear Energy Institute (NEI), an organization responsible for establishing unified nuclear industry policy on matters affecting the nuclear energy industry and the second from the Nuclear Regulatory Services Group (NRSRG), a consortium of power reactor licensees.

In general, NEI states that the NRC's proposed criteria do not adequately incorporate the relevant Commission guidance on this issue and that the public comments made at a public meeting on March 21, 2002, were not taken into account by the NRC staff. The two areas of concern to NEI were the NRC's criteria necessary to evaluate the bundling of individual requirements and the NRC's guidance on using subjective judgment in making bundling decisions.

The law firm of Ballard Spahr Andrews & Ingersoll, LLP, also submitted a set of comments on behalf of the Nuclear Regulatory Services Group (NRSRG). NRSRG calls the proposed criteria "a positive step in providing detailed guidance in this area for the first time" and suggested some refinements of the criteria so that "all proposed new regulatory requirements receive a proper analysis of their costs and benefits."

Comment: NEI's initial comment was that on ". . . rules that provide risk-informed voluntary alternatives to current regulations, an individual requirement should have to be cost-justified and integral to the purpose of the rule rather than [NRC's position that it be] cost-justified or integral to the purpose of the rule." NEI claims that the NRC's criteria ". . . would be a significant disincentive to implementation of voluntary alternative requirements developed by

industry groups because of the lack of scrutable guidance regarding the addition of individual requirements by the NRC staff.”

Response: The NRC believes that its position is correct with respect to the need for each criterion to be considered as a basis for bundling. NRC’s position may be clearer if one considers requirements that are not necessary to a rule as enhancements. Then, if one uses NEI’s criteria of requiring both conditions, i.e., being both cost beneficial **and** necessary, no enhancements to a rule would be tolerated or should even be considered because an enhancement is not necessary to the purpose of the rule. But a fundamental principle of cost benefit methodology is to select the alternative that achieves the largest net benefit, which could conceivably be an alternative with enhancements. Thus, NEI’s position is tantamount to ignoring the cost benefit implications of any requirement that is not necessary to meet the objective of the rule. Under NEI’s approach, cost-beneficial relaxations could not be included in a rulemaking if they were not necessary to the purpose of the rule.

Alternatively, the NRC’s position allows for the selection of the alternative with the largest net benefit. Also, the NRC does not believe that NEI has demonstrated how the proposed criteria would be a “significant disincentive” to the implementation of voluntary alternative requirements developed by industry groups. As long as the voluntary alternatives are shown to be cost-beneficial and result in no decrease in safety from the NRC’s proposed requirement, there should not be a problem.

Comment: NEI notes that the phrase “integral to the purpose of the rule,” used both in a Staff Requirements Memorandum (SRM), dated January 19, 2001, and in the February 2002 preliminary criteria, was subsequently dropped from the proposed criteria. The phrase relates to whether a proposed requirement can be “integral to the purpose of the rule” if the individual

requirement is not cost-beneficial, not required for compliance, and not required for adequate protection. NEI's position is that the phrase should be included in the NRC's final criteria.

Response: The NRC replaced the phrase "integral to the purpose of the rule" as stated in the 2002 criteria, with "necessary to the purpose of the rule" because NRC believes that "necessary" conveys a clearer meaning. As discussed in both the proposed and final criteria papers, a requirement is necessary to the purpose of the rule if it is needed for the regulatory initiative to resolve the problems and concerns, and meet the stated objectives that are the focus of the regulatory initiative.

Comment: NEI believes that NRC analysts need more guidance on making bundling judgments. They claim that because NRC's guidance is confusing and provides no meaningful standard, it is easier for the NRC staff to aggregate requirements without explanation.

Response: The NRC's guidance is consistent with that provided in the Office of Management and Budget's (OMB) Circular A-4, "Regulatory Analysis" issued September 17, 2003, in which OMB recognizes the need to examine individual provisions separately and goes on to state:

Analyzing all possible combinations of provisions is impractical if the number is large and interaction effects are widespread. You need to use judgment to select the most significant or relevant provisions for such analysis. You are expected to document all the alternatives that were considered in a list or table and which were selected for emphasis in the main analysis.

The OMB circular recognizes that judgment must be used for such analyses. The level of analysis needs to be tempered by many factors such as controversiality, complexity, magnitude of consequences, and the like. Also, each regulatory analysis could possibly have unique features that would likely affect the type of analysis that should be done. Further, NRC

final guidance will include reference to the OMB circular and the NRC does not believe additional guidance is needed.

Comment: NEI claims that the use of an analyst's judgment as proposed by the NRC relies too much on NRC management review and public comment. They state: "The burden should be on the NRC to provide sufficient information to evaluate regulatory analysis decisions."

Response: Regulatory analyses are well founded and rely on sound judgments. This is done through peer review, management oversight, review of public comments, etc., and reliance on the analyst's judgment which is central to the regulatory analysis process. The NRC believes that its guidance ensures that its regulatory analyses will provide sufficient information for the public to evaluate regulatory decisions and makes the process both "meaningful and scrutable."

Comment: NEI quotes the SRM calling for regulatory analyses to be "meaningful and scrutable" and claims that the analysis cannot meet this requirement unless there is some documented basis for disaggregation.

Response: The NRC believes that regulatory analyses prepared under the revised guidelines are "meaningful and scrutable," especially given that the guidance is consistent with that provided by OMB on this issue. The reason for disaggregation would be discussed in each regulatory analysis on a case-by-case basis.

Comment: NEI states that the proposed criteria are inconsistent with the other detailed guidance on the treatment of values and impacts contained in NUREG/BR/0058, as currently written.

Response: The NRC disagrees with this comment and believes this final guidance clarifies and supports existing guidance in NUREG/BR-0058. Further, the NRC believes this new guidance is directly relevant to the current discussion on the identification of alternatives.

This guidance considers the scope of requirements and the variability in physical and technical requirements as bases for defining alternatives. This bundling issue should be viewed as an extension or clarification of that discussion.

Comment: NEI states with respect to bundling that the “proposed criteria do not establish a common understanding of new requirements, do not establish a scrutable process for making regulatory decisions about voluntary initiatives, and do not provide sufficient documentation to inform future decisions.”

Response: The NRC reiterates its position that “bundling” guidance sets forth in detail how an analyst should handle the “bundling” issue and is also consistent with the cited OMB guidance. The NRC also believes that regulatory analyses and supporting documentation prepared under the revised guidance will be sufficient to provide documentation which may be reviewed to inform future decisions. The NRC notes that regulatory analyses are prepared as tools to support reasoned decision making and public understanding of the NRC’s decisions; in this regard, the NRC believes that the revised guidelines achieve these objectives.

Comment: NEI requests that the NRC defer its final decision on these criteria until previous comments are “properly addressed.”

Response: Sufficient information was not provided to defer a final decision. The NRC maintains that it has properly addressed all public comments. Also, the Advisory Committee on Reactor Safeguards has stated in a July 17, 2003, letter from its Chairman, Mario V. Bonaca, to the Chairman of the Commission, that the NRC staff’s criteria “are appropriate and responsive to the Commission’s direction.”

Comment: NRSRG stated that the NRC should require separate analysis of individual requirements to the extent practicable. They went on to state “that disaggregation of requirements should be the preferred approach, with the burden on the NRC to justify why separate analysis of individual requirements is not appropriate in a given case.”

Response: The NRC does not agree with the commenter that disaggregation of all requirements is by default either practicable or desirable. The underlying purpose of a regulatory analysis is to provide decision makers with a tool for choosing between options or alternatives. When a regulatory initiative has a number of discreet, yet *necessary* requirements, the decision maker's choice is not whether to include or exclude *necessary* individual requirements but, rather, whether or not to enact the initiative as a whole. Determining the costs of each necessary requirement provides no additional value to the regulatory analysis because those costs are not discretionary with respect to the proposed action under review. Thus, analyses of necessary individual requirements present information which is irrelevant to the decision making.

Further, as stated in the proposed criteria, published for public comment in the *Federal Register* on April 18, 2003 (68 FR 19162): "Specifically, this guidance states that a decision on the level of disaggregation needs to be tempered by considerations of reasonableness and practicality, and that a more detailed disaggregation would only be appropriate if it produces substantially different alternatives with potentially meaningful results." This implies that the analyst must be able to demonstrate that any aggregation in the analysis would not result in different conclusions of the analysis. Therefore, the NRC still does not believe that disaggregation in all cases should be the preferred approach and stands by the position stated in the proposed criteria. As stated in the guidance, "the NRC does not believe that there should be a general requirement for a separate analysis of each individual requirement of a rule. This could lead to unnecessary complexities." Also, NRC believes that its guidance is consistent with OMB Circular A-4, cited above.

Comment: NRSB states that if, according to the criteria, an individual requirement must be both "related" to the stated objective of the regulatory initiative and be "cost-beneficial," then the NRC should clarify what it means by "cost-beneficial." The commenter also states that the

criteria for the treatment of any individual requirement must be consistent with the standards of the backfitting rule. Under the backfit rule, any new requirement that is a backfit must be shown to be cost-justified and produce a “substantial increase” in overall safety. Lastly, their final two points in this section are in agreement with the NRC criteria. First, the commenter agrees with the NRC that in “cases where a new backfit requirement is being considered for inclusion in a voluntary alternative, to current regulations . . . NRC should consider imposing such a new requirement, if justified under the standards of Section 50.109, through the normal disciplined backfitting process, . . . rather than merely including it in a voluntary-alternative rule.” Second, NRSB “agree(s) with the NRC position that if an individual backfit requirement is *not* related to the objective of the regulatory initiative . . . , the ‘requirement must be addressed and justified as a backfit separately.’”

Response: For the most part, the NRC agrees with these comments. With respect to the NRC’s meaning of “cost-beneficial” in the situation discussed by the commenter, the NRC means that the regulatory initiative results in a larger net benefit than would accrue to an action without that requirement. An individual requirement is related to the stated regulatory objective of the regulatory initiative and, overall, is cost justified and constitutes a substantial increase in safety.

Comment: NRSB stated that there should be further guidance on backfitting issues related to the American Society of Mechanical Engineers (ASME) Code. Specifically, they state:

NRC’s guidance should allow the NRC discretion to perform a cost-benefit analysis of individual new requirements contained in later editions of Section XI before they are incorporated wholesale into Section 50.55a. If the NRC finds that individual new requirements of later Code editions are not cost-beneficial for some or all plants, the



NRC should screen out those new individual requirements in accordance with the standards of the backfitting rule.

Response: The Commission's policy regarding Inservice Inspection (ISI) requirements is to assure the integrity of the reactor coolant system (RCS) boundary and containment as they relate to defense-in-depth considerations, that do not lend themselves to cost/benefit analyses. Further, in this specific instance, cost/benefit analyses are not well suited to determine if new requirements that address aging on components are appropriate because of the many uncertainties associated with the effects of aging.

When the Commission formulated its policy, the then Chairman stated that: "Both the ASME and the ACRS have strongly urged that the Commission maintain the current updating requirement" and that –

ASME asserts that the failure of the NRC to incorporate later editions of the Code in the requirements, absent justification under a backfit analysis, would serve to undermine ASME because of the disincentive of volunteers to engage themselves in an ASME process that will not necessarily affect operating plants. Moreover, because some states routinely establish requirements based on current ASME codes, the acceptance of the staff's approach would create the anomaly that non-nuclear facilities might be required to conform to more modern codes than nuclear facilities.

The Chairman also indicated he was aware "that industry participates in the development of the ASME codes and that costs are considered in the amendment process. Thus, although the revisions may not be analyzed with the rigor required by our backfit analysis, the costs and benefits are implicitly weighed."

Another Commissioner commented:

10 CFR 50.109 has served the NRC, our licensees, and our stakeholders well, and thus, my decision to not subject ASME Code updates to its backfit provisions was made only after I carefully considered how the staff's recommended option should exacerbate the complexity, inconsistency, and program divergence associated with our current update process. My decision also came after considering the diverse makeup of the ASME members that produce Code changes and the consensus process they use. . . . I believe that considerations of increased safety versus cost are implicit in the ASME consensus process.

In sum, NRSG's suggested approach is inconsistent with the Commission's previous guidance to the staff.

### III. Final Criteria

In evaluating a proposed regulatory initiative, the NRC usually performs a regulatory analysis for the entire rule to determine whether or not it is cost-justified. However, aggregating or "bundling" different requirements in a single analysis could potentially mask the inclusion of an unnecessary individual requirement. In the case of a rule that provides a voluntary alternative to current requirements, the net benefit from the relaxation of one requirement could potentially support a second unnecessary requirement that is not cost-justified. Similarly, in the case of other types of rules, including those subject to backfit analysis,<sup>1</sup> the net benefit from one requirement could potentially support another requirement that is not cost-justified.<sup>2</sup>

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<sup>1</sup>"The Regulatory Analysis Guidelines of the U.S. Nuclear Regulatory Commission," (NUREG/BR-0058) have been developed so that a regulatory analysis that conforms to these Guidelines will meet the requirements of the Backfit Rule and the provisions of the CRGR Charter.

<sup>2</sup> This discussion does not apply to backfits that the Commission determines qualify under one of the exceptions in 10 CFR 50.109(a)(4). Those types of backfits require a

Therefore, when analyzing and making decisions about regulatory initiatives that are composed of individual requirements, the NRC must determine if it is appropriate to include each individual requirement. Clearly, in certain instances, the inclusion of an individual requirement is necessary. This would be the case, for example, when the individual requirement is needed for the regulatory initiative to resolve the problems and concerns and meet the stated objectives<sup>3</sup> that are the focus of the regulatory initiative.

However, there will also be instances in which the individual requirement is not a necessary component of the regulatory initiative, and thus the NRC will have some discretion regarding its inclusion. In these circumstances, the NRC should follow the following guideline:

If the individual requirement is related (i.e., supportive but not necessary) to the stated objective of the regulatory initiative, it should be included only if its overall effect is to make the bundled regulatory requirement more cost-beneficial. This would involve a quantitative and/or qualitative evaluation of the costs and benefits of the regulatory initiative with and without the individual requirement included, and a direct comparison of those results.<sup>4</sup>

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documented evaluation rather than a backfit analysis, and cost is not a consideration in deciding whether or not the exceptions are justified (though costs may be considered in determining how to achieve a certain level of protection).

<sup>3</sup>The stated objectives of the rule are those stated in the preamble (also known as the Statement of Considerations) of the rule.

<sup>4</sup>There may be circumstances in which the analyst considers including an individual requirement that is unrelated to the overall regulatory initiative. For example, an analyst may consider combining certain unrelated requirements as a way to eliminate duplicative rulemaking costs to the NRC and increase regulatory efficiency. Under these circumstances, it would be appropriate to combine these discrete individual requirements if the overall effect is to make the regulatory initiative more cost-beneficial. In those instances in which the individual requirement is a backfit, the requirement must be addressed and justified as a backfit separately. These backfits are not to be included in the overall regulatory analysis of the remainder of the regulatory initiative.

In applying this guideline, the NRC will need to separate out the discrete requirements in order to evaluate their effect on the cost-benefit results. In theory, each regulatory initiative could include several discretionary individual requirements and each of those discretionary requirements could be comprised of many discrete steps, in which each discrete step could be viewed as a distinct individual requirement. This raises the potential for a large number of iterative cost-benefit comparisons, with attendant analytical complexities. Thus, considerable care needs to be given to the level of disaggregation that one attaches to a discretionary requirement.

In general, a decision on the level of disaggregation needs to be tempered by considerations of reasonableness and practicality. For example, more detailed disaggregation is only appropriate if it produces substantively different alternatives with potentially meaningful implications on the cost-benefit results. Alternatively, individual elements that contribute little to the overall costs and benefits and are noncontroversial may not warrant much, if any, consideration. In general, it will not be necessary to provide additional documentation or analysis to explain how this determination is made, although such a finding can certainly be challenged at the public comment stage.<sup>5</sup> For further guidance, the analyst is referred to principles regarding the appropriate level of detail to be included in a regulatory analysis, as discussed in Chapter 4 of the “Regulatory Analysis Guidelines of the U.S. Nuclear Regulatory Commission.”

In some cases, an individual requirement that is being considered for inclusion in a voluntary alternative to current regulations may be justifiable under the backfit criteria. In these cases the individual requirement is both cost-justified and provides a substantial increase in the overall protection of the public health and safety or the common defense and security. If so, the

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<sup>5</sup>See NUREG/BR-0053, Revision 5, March 2001, “U.S. Nuclear Regulatory Commission Regulations Handbook,” Section 7.9, for discussion of how to treat comments.

NRC should consider imposing the individual requirement as a backfit affecting all plants to which it applies, rather than merely including it in a voluntary-alternative rule affecting only those plants where the voluntary alternative is adopted.

A special case involves the NRC's periodic review and endorsement of voluntary consensus standards, such as new versions of the American Society of Mechanical Engineers (ASME) codes. These NRC endorsements can typically involve hundreds, if not thousands, of individual provisions. Thus, evaluating the benefits and costs of each individual provision in a regulatory analysis can be a monumental task. Further, the value gained by performing such an exercise appears limited. These voluntary consensus standards tend to be noncontroversial and have already undergone extensive external review and been endorsed by industry. Although regulatory actions endorsing these voluntary consensus standards must be addressed in a regulatory analysis, it is usually not necessary for the regulatory analysis to address the individual provisions of the voluntary consensus standards.

The NRC believes this is appropriate for several reasons:

(1) It has been longstanding NRC policy to incorporate later versions of the ASME Code into its regulations; and thus, licensees know when receiving their operating licenses that updating the ASME Code is part of the regulatory process;

(2) Endorsement of the ASME Code is consistent with the National Technology Transfer and Advancement Act, inasmuch as the NRC has determined that there are sound regulatory reasons for establishing regulatory requirements for design, maintenance, inservice inspection and inservice testing by rulemaking; and

(3) These voluntary consensus standards undergo significant external review and discussion before being endorsed by the NRC.

Some aspects of these regulatory actions endorsing voluntary consensus standards are backfits which must be addressed and justified individually. For example, NRC endorsement

(incorporation by reference) of the ASME Boiler and Pressure Vessel Code (BPV) provisions on inservice inspection and inservice testing, and the ASME Operations and Maintenance (OM) Code, are not ordinarily considered backfits, because it has been the NRC's longstanding policy to incorporate later versions of the ASME codes into its regulations. However, under some circumstances the NRC's endorsement of a later ASME BPV or OM Code is treated as a backfit. The application of the backfit rule to ASME code endorsements is discussed in the Appendix below. Aside from these backfits, these regulatory analyses should include consideration of the major features (e.g., process changes, recordkeeping requirements) of the regulatory action which should then be aggregated to produce qualitative or quantitative estimates of the overall burdens and benefits in order to determine if the remainder of the action is justified.

Dated in Rockville, Maryland, this \_\_\_\_\_ day of \_\_\_\_\_, 2004.

For the Nuclear Regulatory Commission.

Annette Vietti-Cook,  
Secretary of the Commission.

## **APPENDIX**

### **Guidance on backfitting related to ASME codes**

Section 50.55a requires nuclear power plant licensees to construct ASME *Boiler and Pressure Vessel Code* (BPV Code) Class 1, 2, and 3 components under the rules provided in Section III, Division 1, of the ASME BPV Code; inspect Class 1, 2, 3, Class MC, and Class CC components under the rules provided in Section XI, Division 1, of the ASME BPV Code; and test Class 1, 2, and 3 pumps and valves under the rules provided in the ASME *Code for Operation and Maintenance of Nuclear Power Plants* (OM Code). From time to time, the NRC amends 10 CFR 50.55a to incorporate by reference later editions and addenda of: Section III, Division 1, of the ASME BPV Code; Section XI, Division 1, of the ASME BPV Code; and the ASME OM Code.

#### **Section A. Incorporation by reference of later editions and addenda of Section III, Division 1 of ASME BPV Code**

Incorporation by reference of later editions and addenda of Section III, Division 1, of the ASME BPV Code is prospective in nature. The later editions and addenda do not affect a plant that has received a construction permit or an operating license, or a design that has been approved because the edition and addenda to be used in constructing a plant are, by rule, determined on the basis of the date of the construction permit and are not changed, except voluntarily by the licensee. Thus, incorporation by reference of a later edition and addenda of Section III, Division 1, does not constitute a “backfitting” as defined in § 50.109(a)(1).

**Section B. Incorporation by reference of later editions and addenda of Section XI, Division 1, of the ASME BPV and OM Codes**

Incorporation by reference of later editions and addenda of Section XI, Division 1, of the ASME BPV Code and the ASME OM Code affect the ISI and IST programs of operating reactors. However, the backfit rule generally does not apply to incorporation by reference of later editions and addenda of the ASME BPV (Section XI) and OM codes for the following reasons--

(1) The NRC's longstanding policy has been to incorporate later versions of the ASME codes into its regulations; thus, licensees know when receiving their operating licenses that such updating is part of the regulatory process. This is reflected in § 50.55a which requires licensees to revise their in-service inspection (ISI) and in-service-testing (IST) programs every 120 months to the latest edition and addenda of Section XI of the ASME BPV Code and the ASME OM Code incorporated by reference into § 50.55a that is in effect 12 months before the start of a new 120-month ISI and IST interval. Thus, when the NRC endorses a later version of a code, it is implementing this longstanding policy.

(2) ASME BPV and OM codes are national consensus standards developed by participants with broad and varied interests, in which all interested parties (including the NRC and utilities) participate. This consideration is consistent with both the intent and spirit of the backfit rule (*i.e.*, the NRC provides for the protection of the public health and safety, and does not unilaterally imposed undue burden on applicants or licensees).

(3) Endorsement of these ASME codes is consistent with the National Technology Transfer and Advancement Act, inasmuch as the NRC has determined that there are sound regulatory reasons for establishing regulatory requirements for design, maintenance, inservice inspection and inservice testing by rulemaking.



**Section C. Other circumstances where the NRC does not apply the backfit rule to the endorsement of a later code**

Other circumstances where the NRC does not apply the backfit rule to the endorsement of a later code are as follows--

(1) When the NRC takes exception to a later ASME BPV or OM code provision, but merely retains the current existing requirement, prohibits the use of the later code provision, or limits the use of the later code provision, the Backfit Rule does not apply because the NRC is not imposing new requirements. However, the NRC provides the technical and/or policy bases for taking exceptions to the code in the Statement of Considerations for the rule.

(2) When an NRC exception relaxes an existing ASME BPV or OM code provision but does not prohibit a licensee from using the existing code provision.

**Section D. Endorsement of later ASME BPV or OM codes that are considered backfits**

There are some circumstances when the NRC considers it appropriate to treat as a backfit the endorsement of a later ASME BPV or OM code--

(1) *When the NRC endorses a later provision of the ASME BPV or OM code that takes a substantially different direction from the currently existing requirements, the action is treated as a backfit.* An example was the NRC's initial endorsement of Subsections IWE and IWL of Section XI, which imposed containment inspection requirements on operating reactors for the first time. The final rule dated August 8, 1996 (61 FR 41303), incorporated by reference in § 50.55a the 1992 Edition with the 1992 Addenda of IWE and IWL of Section XI to require that containments be routinely inspected to detect defects that could compromise a containment's structural integrity. This action expanded the scope of § 50.55a to include components that were not considered by the existing regulations to be within the scope of ISI. Because those

requirements involved a substantially different direction, they were treated as backfits, and justified under the standards of 10 CFR 50.109.

(2) *When the NRC requires implementation of later ASME BPV or OM code provision on an expedited basis, the action is treated as a backfit.* This applies when implementation is required sooner than it would be required if the NRC simply endorsed the Code without any expedited language. An example was the final rule dated September 22, 1999 (64 FR 51370), which incorporated by reference the 1989 Addenda through the 1996 Addenda of Section III and Section XI of the ASME BPV Code, and the 1995 Edition with the 1996 Addenda of the ASME OM Code. The final rule expedited the implementation of the 1995 Edition with the 1996 Addenda of Appendix VIII of Section XI of the ASME BPV Code for qualification of personnel and procedures for performing ultrasonic (UT) examinations. The expedited implementation of Appendix VIII was considered a backfit because licensees were required to implement the new requirements in Appendix VIII before the next 120-month ISI program inspection interval update. Another example was the final rule dated August 6, 1992 (57 FR 34666), which incorporated by reference in § 50.55a the 1986 Addenda through the 1989 Edition of Section III and Section XI of the ASME BPV Code. The final rule added a requirement to expedite the implementation of the revised reactor vessel shell weld examinations in the 1989 Edition of Section XI. Imposing these examinations was considered a backfit because licensees were required to implement the examinations before the next 120-month ISI program inspection interval update.

(3) *When the NRC takes an exception to an ASME BPV or OM code provision and imposes a requirement that is substantially different from the current existing requirement as well as substantially different than the later code.* An example of this is presented in the portion of the final rule dated September 19, 2002, in which the NRC adopted dissimilar metal piping weld UT examination coverage requirements from those in the ASME code.