

November 17, 2003

MEMORANDUM TO: William D. Travers
Executive Director for Operations

FROM: Ashok C. Thadani, Director **/RA/**
Office of Nuclear Regulatory Research

SUBJECT: ACTION PLAN – ADMINISTRATIVE CONTROLS FOR
PLANT-SPECIFIC BACKFITS (GREEN TICKET NO. 20030549)

Attached for your approval is the Action Plan for NRC's administrative controls for plant-specific backfits. The development of this plan has been coordinated with the Office of Nuclear Reactor Regulation (NRR), the Office of Nuclear Material Safety and Safeguards (NMSS), the Office of Nuclear Security and Incident Response (NSIR), the Office of Administration (ADM), the Office of the Chief Information Officer (OCIO), the Office of Human Resources/Associate Director for Training and Development (HR/ADTD), and each Regional office.

In 2002, consistent with its Charter, the Committee To Review Generic Requirements (CRGR) initiated a review of the NRC's individual office-specific administrative controls on backfitting that focused on the plant-specific backfit processes in the program and Regional offices. This review also addressed the concerns raised by the industry representatives during the CRGR's process of obtaining feedback on the NRC's generic and plant-specific backfit processes. The CRGR, in its report, "Review of Administrative Controls for Plant Specific Backfits," July 31, 2003 (ML032230132), made a number of recommendations to improve the NRC's plant-specific backfit process.

This Action Plan describes the key activities that need to be completed to address the CRGR recommendations. In its role of providing CRGR support, the Office of Nuclear Regulatory Research (RES) will take the lead in coordinating implementation of this Action Plan. In addition to RES, the activities described in this Action Plan will involve NRR, NMSS, NSIR, ADM, OCIO, HR/ADTD, and each Regional office. These activities are grouped into four areas: (1) revising Management Directive (MD) 8.4, "NRC Program for Management of Plant-Specific Backfitting of Nuclear Power Plants"; (2) developing or revising Office and Regional backfit procedures that are consistent with the revised MD 8.4; (3) planning and developing backfit training; and (4) establishing a backfit recordkeeping system.

RES will take the lead to revise MD 8.4 to reflect changes in NRC's organizational responsibilities and backfit program, and to address important elements for ensuring effective management of plant-specific backfits. RES will also coordinate the review and concurrence process, inter-office reviews and concurrences, and final issuance. Additionally, RES will develop an office procedure to reflect its role in the oversight of the regulatory analysis guidelines.

CONTACT: Raji R. Tripathi (RES:DSARE)
415-7472
Charles E. Ader (RES:DSARE)
415-0135

The revised MD 8.4 would provide the basis for development or revision of the Office and Regional procedures. Working with other Regional offices, Region IV will take the lead in developing a template for a regional backfit procedure. This approach would not only provide uniformity and consistency in the Regional backfit procedures and practices, but would also be resource-saving. Presently, NRR and NMSS are nearing completion of an earlier initiative to revise their office backfit guidance. Given the differences in the nuclear power reactor and materials facilities regulated by the NRC and the applicable backfit regulations, as well as the recent efforts to revise the NRR and NMSS backfit procedures, it is not considered necessary to develop a template to guide the revisions to the individual office procedures. NSIR will adopt the key features of the revised procedures to develop security-related backfit procedures.

The estimated resource requirements are: RES – 0.5 FTE; NRR and NMSS – 0.25 FTE each; NSIR – 0.35 FTE; HR/ADTD – 0.2 FTE; and the Regional offices – 0.4 FTE, a total of 2.0 FTE. We expect most activities to be completed in FY 2004, with the exception of developing or revising NMSS and NSIR backfit guidance, and developing the backfit training program, which will continue through the middle of FY 2005. Each office will use the Planning, Budgeting and Performance Management Process to adjust its resources to accommodate the effort.

Attachment: As stated

Dated: December 19, 2003

Approval: *Original signed by:*
IRA

William D. Travers

APPROVAL – ADAMS ACCESSION NUMBER ML033630497

(Refer to ADAMS Package ML033210331)

**ACTION PLAN FOR RESOLUTION OF
CRGR RECOMMENDATIONS ON
NRC'S ADMINISTRATIVE CONTROLS FOR
PLANT-SPECIFIC BACKFITS**

Lead: Office of Nuclear Regulatory Research

Support: Office of Nuclear Reactor Regulation
Office of Nuclear Materials Safety and Safeguards
Office of Nuclear Security and Incident Response
Regional Offices
Office of Administration
Office of Chief Information Officer
Office of Human Resources

BACKGROUND

The term “backfit” is defined as the modification of or addition to systems, structures, components; the design of a facility; or the procedures or organization required to design, construct, or operate a facility; any of which 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. The NRC process for backfitting is described in the Committee to Review Generic Requirements (CRGR) Charter (Reference 1), Management Directive (MD) 8.4, “NRC Program for Management of Plant-Specific Backfitting of Nuclear Power Plants,” (Reference 2), and the program and Regional procedures. The staff guidance is included in NUREG-1409, “Backfitting Guidelines” (Reference 3).

As mandated by its Charter, the CRGR reviews proposals from the NRC staff or at the direction of the NRC Executive Director for Operations (EDO) for potential backfitting. Most of the CRGR Charter describes the review of new or revised generic proposals or modified staff positions that affect multiple licensees. However, the Charter directs the CRGR to review the NRC’s control mechanisms for the adequacy and effectiveness of generic and plant-specific backfit processes. In 2002, the CRGR initiated a review of the NRC’s individual office-specific administrative controls on backfitting that involved both a review of the key documents and procedures, as well as discussions with the representatives of the NRC’s Offices of Nuclear Reactor Regulation (NRR), Nuclear Materials Safety and Safeguards (NMSS), Nuclear Security and Incident Response (NSIR), Nuclear Regulatory Research (RES), and the Regions. The CRGR review focused on the plant-specific backfit processes in the program and regional offices. This review also addressed the concerns raised by the industry representatives during the CRGR’s process of obtaining feedback on the NRC’s generic and plant-specific backfit processes. Generally, these concerns were about the adequacy of NRC’s controls for the plant-specific backfit process, including the appeal process for staff-imposed backfits.

The CRGR submitted its report (Reference 4) to the EDO via a memorandum, dated August 8, 2003 (Reference 5), in which the Committee made 17 recommendations (Table 1) to address 6 findings. On September 22, 2003, the EDO directed RES to coordinate the development of an Action Plan with NSIR, NRR, NMSS, and the Regions, and to provide the EDO with schedules and resources to accomplish resolution of the CRGR recommendations (Reference 6).

PROPOSED APPROACH

This Action Plan describes the key activities to address the CRGR recommendations on NRC’s administrative controls for plant-specific backfits (Reference 4) to improve the NRC’s plant-specific backfit process. In its role of providing CRGR support, RES will take the lead in coordinating implementation of this Action Plan. As outlined below, the implementation of the activities in this Action Plan will involve NRR, NMSS, NSIR, ADM, OCIO, HR/ADTD, and each Regional office, along with RES.

The activities necessary to address the CRGR recommendations are grouped into four areas and involve (1) the revision of MD 8.4 (2) development of Office and Regional procedures that are consistent with the revised MD 8.4 (3) development of a backfit training program and (4) establishment of a recordkeeping system.

The first activity will be the revision of MD 8.4. The MD 8.4 development and review process would be conducted in accordance with revised MD 1.1, "NRC Management Directive System." RES will take the lead to develop a revised MD 8.4 to reflect changes in NRC's organizational responsibilities and backfit program and to address important elements for ensuring the effective management of backfits. RES will coordinate the review and concurrence process, interoffice reviews and concurrences, and final issuance. A revised MD 8.4 would provide the basis for the Office and Regional backfit procedures.

The development or revision of the Office and Regional backfit procedures would begin shortly after the interim draft revision of MD 8.4 is sent to the Office/Regional contacts. For the Regional offices, a template of a regional procedure would be developed to provide uniformity and consistency in the Regional backfit procedures and practices and to reduce the resource expended by each Regional office for developing individual procedures. Region IV will take the lead in developing this template, working with the other Regional offices. Presently, NRR and NMSS are nearing completion of an earlier initiative to revise their office backfit guidance. Given the differences in the nuclear power reactor and materials facilities regulated by the NRC and the applicable backfit regulations, as well as the recent efforts to revise the NRR and NMSS backfit procedures, it is not considered necessary to develop a template to guide the revisions to the individual office procedures. Nevertheless, CRGR will review the individual Office and Regional procedures to ensure that they are consistent and that they address the CRGR recommendations. In conjunction with the MD 8.4 modification, RES will develop an Office Procedure to reflect its role in the oversight of the regulatory analysis guidelines. This effort would be conducted concurrently with the MD revision and would be completed shortly after the issuance of MD 8.4.

As part of the consolidation of the functions of NRC's former Office for Analysis and Evaluation of Operational Data (AEOD), the responsibility for NRC's backfit oversight, in the context of 10 CFR 50.109 principally focused on reactor licensee requirements, was assigned to NRR (SECY-98-0228). In fulfilling its backfit-related function, NRR has developed a web-based power reactor backfit training module (<http://www.internal.nrc.gov/NRR/BACKFIT/>). However, that module does not address either the fuel facilities or security-related backfitting. As part of this Action Plan, it is proposed that working with RES, NRR, NMSS, and NSIR, HR/ADTD take the lead to develop and implement a training program for basic and refresher backfit training for the staff. As part of this effort, RES will also consider the need to revise NUREG-1409 based on whether adequate backfit guidance has been incorporated in the revised MD 8.4, Office and Regional backfit procedures, and the backfit training program.

RES will take the lead in working with OCIO to develop the guidance for establishing a centralized recordkeeping system for plant-specific backfitting cases and documents. CRGR will review the revised MD 8.4 and the revised draft Office and Regional backfit procedures to ensure their consistency with the revised MD 8.4. The current CRGR Charter has a provision that would encompass performing periodic audits and reviews (a function previously performed by AEOD) to assess the adequacy of the program office and Regional backfit processes and advising the EDO regarding the same. The CRGR will conduct the backfit audits approximately every 5 years and will decide the mechanisms to accomplish these goals.

RESOURCES

An additional 2.0 FTEs are anticipated to be needed to complete the activities in this Action Plan:

REFERENCES

1. Charter of the Committee to Review Generic Requirement, Revision 7, November 1999 (ML0037183741).
2. MD 8.4, "NRC Program for Management of Plant-Specific Backfitting of Nuclear Power Plants" (Adopts Manual Chapter 0514, NRC Program for Management of Plant-Specific Backfitting of Nuclear Power plants," August 26, 1988).
3. NUREG-1409, "Backfitting Guidelines," USNRC, July 1990.
4. CRGR Report, "Review of Administrative Controls for Plant Specific Backfits," July 31, 2003 (ML032230132).
5. Memorandum from Charles Ader to William D. Travers, "The Committee To Review Generic Requirements Review of Administrative Controls for Plant Specific Backfits," August 8, 2003 (ML032230132).
6. EDO Green Ticket No. 20030549, "CRGR Review of Backfit Controls for Plant-specific Backfits," dated September 22, 2003.

Milestone	Date (T: Target) (C: Complete)	Lead	Support
1. Revise Management Directive 8.4, “NRC Program for Management of Plant-Specific Backfitting of Nuclear Power Plants”			
Obtain Office-level agreement on the Office and Regional responsibilities	1/04 (T) (assumes approval of action plan by 12/03)	RES	NRR NMSS NSIR Regions
Develop Draft Revised MD 8.4, addressing CRGR recommendations, and organizational/procedural controls. CRGR Recommendations: 2.1, 2.2, 2.3, 2.4, 2.5, 2.6 4.1, 4.2, 4.3 5.1 6.1	3/04 (T)	RES	NRR NMSS NSIR ADM Regions
Interoffice Review	5/04 (T)	NRR NMSS NSIR Regions OGC OIG	RES
Comment Resolution	6/04 (T)	RES	NRR NMSS NSIR ADM Regions
Finalize MD 8.4	7/04 (T)	ADM	RES
Issue Final MD 8.4.	9/04 (T)	ADM	RES (Minimal)

Milestone	Date (T: Target) (C: Complete)	Lead	Support
2. Implement backfit controls that are consistent with Management Directive 8.4.			
Develop template for Regional backfit procedures. CRGR Recommendations: 1.1, 1.2, 1.3 5.1 6.1, 6.2	6/04 (T)	Region IV	Regions
Develop or revise draft Office and Regional backfit procedures that are consistent with the revised MD 8.4.	8/04 (T)	NRR Regions	-
	12/04 (T)	NMSS NSIR	-
Develop office procedure to integrate role of the regulatory analysis guidelines in the NRC's backfit process.	6/04 (T)	RES	-
Review of Office and Regional procedures to ensure consistency with MD 8.4, and resolution of CRGR recommendations.	9/04 (T)	CRGR	RES NRR Regions
	1/05 (T)	CRGR	NMSS NSIR
Resolution of comments, within office and Region review.	9/04 (T)	NRR Regions	-
	1/05 (T)	NMSS NSIR	-
Approval of Office and Regional backfit procedures, and RES office procedure.	11/04 (T)	NRR Regions RES	-
	3/05 (T)	NMSS NSIR	-

Milestone	Date (T: Target) (C: Complete)	Lead	Support
3. Backfit training			
<p>Develop backfit training program for the staff by considering a graded approach and providing access to varying levels of information in the beginner, advanced and refresher training.</p> <p>CRGR Recommendations: 3.1 3.2</p>	3/05 (T)	HR/ADTD	RES NRR NMSS NSIR Regions
4. Develop or update a recordkeeping system			
<p>Establish a centralized or consistent NRC-wide recordkeeping system for management of plant-specific backfits or ensure consistency in individual record keeping systems.</p> <p>CRGR Recommendation: 2.4</p>	9/04 (T)	RES	OCIO

Table 1 CRGR Recommendations

Finding	Recommendations
<p>1. NRC Offices need to implement backfit controls that are generally consistent with guidelines Management Directive 8.4.</p> <p>(Also see Findings 2 and 5)</p>	<p>1.1 All offices need to establish guidelines for procedure revision and provide for regular review and update.</p> <p>1.2 NSIR should have procedures reflecting its office activities that may encounter potential backfits and how they are processed.</p> <p>1.3 Consider providing offices with a template or generic Regional and Program Office procedures to aid in consistency and efficiency.</p>
<p>2. Management Directive 8.4, “NRC Program for Management of Plant-Specific Backfitting of Nuclear Power Plants” does not reflect changes that have occurred in organizational responsibilities nor in the NRC backfit program and does not highlight important elements for ensuring effective management of backfits.</p> <p>(Also see Finding 5)</p>	<p>Management Directive 8.4 needs to be updated to address the following:</p> <p>2.1 Identify an organization responsible for ensuring that process controls for overall NRC management and oversight of plant-specific backfit processes are updated, maintained and implemented</p> <p>2.2 Expand to cover backfit rules in 10 CFR 70.76, 72.62, and 76.76</p> <p>2.3 Expand to include physical security and safeguards backfit</p> <p>2.4 Establish a centralized or consistent NRC-wide record keeping system for management of plant-specific backfits or consistency in individual record keeping systems</p> <p>2.5 Include a process for a periodic audit of implementation of the program</p>

Table 1 CRGR Recommendations

Finding	Recommendations
	<p>2.6 Clarify organizational roles (including OEDO) in overseeing or implementing backfit processes.</p>
<p>3. The NRC program for training employees on the backfit process is not clearly defined</p>	<p>3.1 The NRC needs to provide some training on managing the backfit process which is available agency-wide and explains both generic and plant-specific backfit process for all types of licensees covered by backfit rules.</p> <p>3.2 A graded approach should be considered to ensure that new employees have the benefit of learning what led to the backfit process and every one has access to knowledge in the level of detail warranted by their job responsibilities</p>
<p>4. The decision process for plant-specific backfits is not clearly described in individual office procedures that are not readily available to licensees</p> <p>(Also see Finding 2)</p>	<p>4.1 The decision processes should be described in Management Directive 8.4 and communicated to the licensees</p> <p>4.2 Consider adopting a backfit appeal process which ensures that the decision maker for the backfit appeal process is independent from the group or individuals involved in the original decision</p> <p>4.3 Provide guidelines for consistent communication of the backfit processes to licensees</p>
<p>5. Management Directive 8.4 and office procedures do not provide guidance in potential backfitting in the security or safeguards areas under 10 CFR Part 73</p> <p>(Also see Findings 1, 2 & 4)</p>	<p>5.1 Modify Management Directive 8.4 and backfit procedures to clarify and establish controls for actions related to the physical security and safeguards areas in 10 CFR Parts 73 consistent with the backfit rules in 10 CFR Parts 50, 70 and 72</p>

Table 1 CRGR Recommendations

Finding	Recommendations
<p>6. The functions performed by the Office of Nuclear Regulatory Research (RES) with respect to regulatory analysis guidelines are not clearly established in the backfit procedures. RES plays an active role in the technical and administrative support of the CRGR, which makes it a candidate for the oversight of other backfit functions at the agency level.</p>	<p>6.1 Management Directive 8.4 should be modified to describe the role of RES in oversight of the regulatory analysis guidelines (i.e. maintaining the Agency level guidelines for implementation by NRR, NMSS, NSIR, and the Regional Offices)</p>
	<p>6.2 In conjunction with the Management Directive modification, RES could revise the RES Office procedures to reflect the RES role in oversight of the regulatory analysis guidelines</p>