



Report to the Commission

Review of The Staff's Implementation of the Interim Procedures for Managing Plant-Specific Backfitting of Power Reactors

Office of Inspector and Auditor

June 1985

NOTICE

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

June 21, 1985

MEMORANDUM FOR: Chairman Palladino
Commissioner Roberts
Commissioner Asselstine
Commissioner Bernthal
Commissioner Zech

FROM: *for* Sharon R. Connelly, Director
Office of Inspector and Auditor

SUBJECT: REVIEW OF THE STAFF'S IMPLEMENTATION OF THE INTERIM
PROCEDURES FOR MANAGING PLANT-SPECIFIC BACKFITTING OF
POWER REACTORS

Attached is our report on the results of our review of the staff's implementation of the interim procedures for managing plant-specific backfits. Our review was conducted at NRC Headquarters between January and March 1985 and focused on the adequacy of the interim procedures for controlling plant-specific backfits contained in draft Manual Chapter 0514, which was approved by the Commission in February 1984. Our evaluation of the procedures was based largely on detailed analysis of 22 issues being tracked as backfits by the Office of Nuclear Reactor Regulation (NRR). Included in these 22 issues were four issues identified as backfits by Duquesne Light Company relating to Beaver Valley 2.

Conclusions and Recommendations

Based on our review of the staff's implementation of the interim procedures for managing plant-specific backfitting approved by the Commission, we believe the procedures were not adequate. The major problem we observed was that the interim procedures lacked the necessary specificity to allow the staff to adequately manage and control issues identified as backfits. In this regard, the procedures were directed solely to backfits identified by the staff and did not provide guidance on how to handle backfits identified by utilities. The effect was that many issues were tracked as backfits by NRR without a prompt determination as to whether they were backfits. In addition, appeal meetings provided for in the procedures were only scheduled if a specific written request was received from the utility.

In regard to Beaver Valley 2, our review showed that the staff's handling of issues relating to Beaver Valley 2 was typical of their handling of all plant-specific backfit issues. For this reason, we did not focus on the Beaver Valley issues in our report but attempted to resolve the overall problems with the plant-specific backfit procedures.

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The Deputy Executive Director for Regional Operations and Generic Requirements revised draft Manual Chapter 0514 and implemented it on an interim basis on May 1, 1985. This revision is a significant improvement over the earlier interim procedures but, in our opinion, needs further improvement.

We believe many issues identified as backfits by utilities to date are not really backfits but are technical disagreements over the adequacy of the utilities' actions to implement requirements. As a result, we believe formal procedures need to be developed for resolving technical disagreements between utilities and the staff. Such procedures have the potential for eliminating utility identification of inappropriate issues as backfits simply to elevate a technical disagreement to NRC management.

Our report makes five recommendations to improve the procedures contained in draft Manual Chapter 0514 and NRC's management of plant-specific backfits. The EDO's response to one of our recommendations (Recommendation 2) presents a potential disagreement between OIA and the EDO. This disagreement centers around the need for guidance to the staff on handling issues on plants in the licensing process which would be backfits under the definition in 10 CFR 50.109 but which will not be backfits under the revised definition in draft MC 0514. A fuller explanation of this disagreement appears on page 13 of our attached report. We are continuing our efforts to resolve this disagreement and will later elevate the recommendation to the Commission for resolution if necessary. In the interests of having our report available to the Commission for the scheduled Commission meeting on the final backfit rule, we are issuing our report prior to resolution of that recommendation.

Attachment:
As stated

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THIS REPORT IS BEING PROVIDED FOR THE COMMISSION'S
INFORMATION. NO ACTION BY THE COMMISSION
IS REQUIRED AT THIS TIME.

REVIEW OF THE STAFF'S IMPLEMENTATION OF THE
INTERIM PROCEDURES FOR MANAGING PLANT-SPECIFIC
BACKFITTING OF POWER REACTORS

EXECUTIVE SUMMARY

In mid-1983 the Commission concluded that neither the current regulations nor the staff practices for the imposition of backfits were adequate. As a result, the Commission directed the staff to develop implementing procedures and requirements designed to effectively manage plant-specific backfitting of operating power reactors. In response, the staff prepared draft Manual Chapter 0514 and implementing procedures for the management and control of plant-specific backfits. The draft manual chapter and procedures were submitted to the Commission in SECY 83-321, dated August 5, 1983, and approved by the Commission on February 8, 1984, as interim guidance until the backfit rule has been finalized. In October 1983, however, the Director, Office of Nuclear Reactor Regulation (NRR), had already directed the NRR staff to implement the procedures contained in SECY-83-321 for operating reactors and to generally follow those procedures for operating license reviews. On April 4, 1984, the Director, Division of Licensing, NRR, issued Generic Letter 84-08 advising all licensees, applicants for operating licenses, and holders of construction permits that the Commission had approved the interim procedures for managing plant-specific backfits.

The Office of Inspector and Auditor has reviewed the staff's implementation of the interim procedures for managing and controlling plant-specific backfits at nuclear power reactors. The audit was performed at NRC Headquarters between January and March 1985, and focused on NRR's handling of issues identified and tracked as backfits. We reviewed in detail 22 backfit issues in varying stages of processing, including four issues identified by Duquesne Light Company relating to Beaver Valley 2. Because of the substantial interest in the staff's handling of backfit issues at Beaver Valley 2, we also generally reviewed 11 other issues identified as backfits relating to Beaver Valley 2.

Descriptions of the staff's handling of several issues being tracked as backfits are shown in the Appendices to this report. Appendix I discusses two issues relating to Beaver Valley 2. Appendix II discusses a backfit issue involving NRR and another NRC program office. Appendix III discusses one issue resolved through the appeal process set out in MC 0514.

FINDINGS

Our review of the implementation of the interim procedures for controlling plant-specific backfits approved by the Commission in February 1984 showed principally that the interim procedures are not adequate. The major problem we observed was that the procedures are aimed almost exclusively at backfit issues identified by the staff before they are communicated to the utilities. The informal appeal process contained in the interim procedures also presumes that only proposed new requirements already considered as backfits by the NRC staff would be subject to appeal by the utilities.

Our review of 22 backfit issues being tracked within NRR, however, showed that almost all were initially identified by utilities based on NRC staff positions

contained in various documents originating in NRC. We did not find any backfit issues in our sample that were identified by the staff and processed in accordance with the interim procedures prior to being communicated to the utilities. We did find some issues that were identified as potential backfits by Project Managers in NRR, but these issues were not handled under the interim procedures unless the utilities also raised the issues. Therefore, the staff did not pursue the issues as backfits if they were accepted by the utilities. The effect of these inadequacies is that most backfit issues were not resolved in the spirit we believe the Commission intended when the interim procedures were approved for implementation.

Because the procedures did not anticipate licensee identification of issues not previously identified by the staff, two important provisions were not addressed in draft Manual Chapter (MC) 0514. First, MC 0514 contained no guidance to the staff on how to handle issues identified by the utilities. Supplemental guidance provided to Division of Licensing staff by the Director, Division of Licensing, NRR, did not help because it made the utility identification of a backfit and utility appeal of the backfit two separate actions. Second, MC 0514 did not require an early decision as to whether an issue was or was not a backfit, because it was assumed that licensees would only appeal issues already determined to be backfits by the staff.

As a result of these deficiencies, many issues which were not backfits, or were not known to be backfits under the intent of MC 0514, were being tracked as backfits by NRR. Furthermore, in the absence of specific guidance, the staff was handling these issues as they handled the resolution of other technical differences with utilities -- through technical negotiation rather than through the appeal process prescribed in MC 0514. During this process extended negotiations sometimes took place between the utility and NRC staffs before first level appeal meetings were scheduled, or the utility and NRC staffs resolved the issue prior to an appeal meeting.

At the time of our review, the staff of the Deputy Executive Director for Regional Operations and Generic Requirements (DEDROGR) was revising MC 0514. We reviewed a draft of the revision dated February 4, 1985, and discussed the results of our review with the DEDROGR staff responsible for its revision. On April 12, 1985, the DEDROGR issued another draft revised MC 0514 to be implemented on an interim basis on May 1, 1985. Our review of this most recent revision showed that it resolved several of our concerns with the original MC 0514; however, other problems remain.

One specific problem area we noted was that the draft MC 0514 changes the definition of a backfit to conform with the proposed new backfit rule being considered by the Commission. We believe procedures need to be developed to handle issues which are not backfits under the new definition but which would have been backfits under the previous definition.

We also believe that because there are no formal procedures for resolving technical disagreements between NRC and utilities, many technical disagreements are appealed under the backfit procedures in an attempt to get NRC management attention.

Our detailed review of four issues and our general review of the other 11 issues identified as backfits by the Duquesne Light Company for Beaver Valley 2 led us to conclude that the staff's handling of Beaver Valley issues was typical of their handling of identified backfit issues relating to all plants.

CONCLUSION

Based on our review of the staff's implementation of the February 1984 interim procedures to manage and control plant-specific backfitting, we believe the procedures are not adequate. The major problem we observed was that the procedures as interim guidance lacked the necessary specificity to allow the staff to adequately manage and control issues identified as backfits.

The interim procedures were established to provide guidance on how to handle backfit issues identified by the staff prior to being communicated to the utility, but failed to take into account that backfits identified by utilities should be treated with some diligence. Therefore, many backfit issues were tracked by NRR without a prompt determination by management as to whether they were backfits. In addition, appeal meetings were only scheduled for those backfits for which a specific written request was made by the utility rather than NRC initiating the action to resolve the issue in a more timely manner.

The procedures contained in the revised Manual Chapter 0514, implemented on an interim basis on May 1, 1985, are a significant improvement over the interim procedures implemented in February 1984, but still need improvements. We believe the staff should assure that the utilities have adequate opportunity to review and comment on the revised procedures before they are finalized.

We believe additional procedures also need to be developed for (1) making backfit determinations resulting from the changed definition of backfits; and (2) resolving technical disagreements between utilities and the staff, especially for issues that are appealed under the backfit procedures but determined to be regulatory requirements and not backfits. We believe the development of the latter procedures has the potential for eliminating utility identification of inappropriate issues as backfits, since it would give them another avenue for appeal. Such procedures should also expedite resolution of technical disagreements.

RECOMMENDATIONS

1. We recommend the EDO assure that the additional improvements to MC 0514 we identify on pages 7 and 8 of our report are included in the revision to MC 0514.
2. We recommend that the EDO provide guidance to Office Directors/Regional Administrators as to how issues which would be backfits under the current definition in 10 CFR 50.109 but which will not be backfits under the revised definition of backfits in revised MC 0514 are to be handled.
3. We recommend that the Director, NRR, develop formal procedures for resolving, in a timely manner, technical disagreements between the NRR and utility staffs, especially as they relate to issues identified by utilities as backfits but determined by NRR not to be backfits.

4. We recommend that the DEDROGR staff hold regional meetings with utilities to explain the revised plant-specific backfit procedures and receive their comments prior to finalizing MC 0514.
5. We recommend that the Director, NRR, establish procedures to keep all responsible staff within NRR fully informed on issues appealed as backfits.

AGENCY COMMENTS

On June 20, 1985, the EDO commented on a draft of this report. The EDO generally agreed with three and disagreed with two of the five additional improvements, to MC 0514 recommended in Recommendation 1. The EDO generally agreed with Recommendations 3, 4 and 5. The EDO disagreed with Recommendation 2 that guidance be developed regarding handling of issues which would be backfits under the current definition in 10 CFR 50.109 but which will not be backfits under the revised backfit definition in draft MC 0514. We disagree with the EDO's response. However, because this is a complex policy issue and we believe the EDO does not fully understand the implications of our recommendation, at least to our satisfaction, we will further pursue its resolution. If we can not reach agreement with the EDO on this issue we will elevate it to the Commission for resolution.

A copy of the EDO's June 20, 1985, memorandum is Appendix V of our report. Our analysis of the EDO comments begins on page 12 of our report.

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INTRODUCTION

On February 8, 1984, the Commission approved interim procedures for the management of plant-specific backfits. At that same time, the Commission directed the Office of Inspector and Auditor to conduct an audit of the staff's first year's experience with the new procedures. This report presents the results of our audit.

Background

Backfitting is generally referred to as the imposition of new regulatory requirements or new interpretations of regulatory requirements for nuclear power reactors. The first formal appearance of backfitting in the regulations governing commercial nuclear power plants was on April 16, 1969, when the Atomic Energy Commission (AEC) published for comment a proposed new section to Part 50, Title 10 of the Code of Federal Regulations (10 CFR 50.109). The purpose of the proposed regulation was to indicate the circumstances under which the AEC could require backfitting of facilities. On March 31, 1970, the AEC promulgated the regulation, essentially unchanged. While Section 50.109 is the formal statement about backfitting in the Commission's regulations, the NRC has invoked it only rarely.

The process of backfit decision-making, when it has been applied, has at times been largely ad-hoc without consistent criteria being applied to backfit decisions. The pace of backfit requirements increased considerably after the Three Mile Island accident and created concern that such accumulation of regulatory actions present a potential safety problem.

The concern for controlling backfitting is not new. Licensees have complained of the economic and potential safety consequences of inappropriate backfitting for some time. The NRC staff has also recognized the problem within the context of the staff's review and in January 1979 prepared a paper (SECY-79-8) for Commission consideration on the generation of new reactor requirements. That paper, prepared by the Director, Office of Nuclear Reactor Regulation (NRR), provided in part an analysis of the problems of determining the need for new requirements. However, the occurrence of the accident at Three Mile Island in March 1979 effectively sidetracked substantial consideration of the backfitting aspects of that proposal.

In a mid-1983 review of the NRC requirements and staff practices for the imposition of plant-specific backfits the Commission concluded that neither the current regulation nor the staff practices were adequate. The Commission, therefore, directed the staff on June 22, 1983, to develop a plan for implementing procedures and requirements designed to effectively manage plant-specific backfitting of operating power reactors only. This was intended by the Commission to be an interim measure until the completion of rulemaking activities, which were expected to result in the modification or replacement of 10 CFR 50.109. Procedures for controlling plant-specific backfits on operating license candidates and construction permit holders were being investigated concurrently and were expected to be reported on separately at a later date.

The staff responded to the Commission's direction by drafting (1) proposed Manual Chapter 0514, "NRC Program for Management of Plant-Specific Backfitting

of Operating Power Reactors"; and (2) separate procedures for managing backfitting resulting from licensing activities and inspection and enforcement activities. This plan was forwarded to the Commission as SECY 83-321 on August 5, 1983.

The interim procedures contained in SECY 83-321 provide that the NRC staff is to describe how any new staff-proposed requirement would improve plant safety, and that the requirement must be approved by specified levels of management before it is formally transmitted to the licensee. The procedures provide for an "informal appeal process" under which utilities may appeal to NRC management that a new staff-proposed backfit requirement be withdrawn or modified. The informal appeal process begins at the assistant director level, Division of Licensing, and then goes to the Director, Division of Licensing, if either the utility or the NRC staff are not satisfied with the first-level resolution. The third and final appeal is with the Director, NRR. If, after use of the informal appeal process, a licensee notifies the Director, NRR, in writing that it objects to a proposed backfit licensing requirement, the NRC staff must then assess the costs and benefits of the proposed requirement.

Prior to Commission action on SECY 83-321, the Director, NRR, in a memorandum dated October 25, 1983, to all NRR employees directed that any action considered to be a backfit would be handled in accordance with the interim procedures contained in SECY 83-321. The memorandum also provided that backfits to applicants for operating licenses should also be promptly identified to management and temporarily handled on a case basis, but generally following the guidelines of SECY 83-321.

To meet the record keeping requirements contained in SECY-83-321, the Operating Reactors Assessment Branch, Division of Licensing, NRR, was delegated the lead responsibility for developing a system to track all backfitting issues resulting from licensing activities. By mid-January 1984, this system was essentially in place. The major elements of this system are each Assistant Director in the Division of Licensing is responsible for reporting the status of his backfitting items for the previous month to the Division Director within five working days of the next month; and the Lead Project Manager for backfitting activities in the Operating Reactors Assessment Branch is then responsible for completing a report for the Director, NRR, on the status of all items.

In a memorandum dated February 8, 1984, SECY informed the Executive Director for Operations (EDO) that the Commission had approved the staff's plan for the management of plant-specific backfitting on operating nuclear power plants on an interim basis until a final decision had been made on the proposed rule. In addition, the Commission asked that the staff publish the plan and procedures for public comment, and consider possible revisions after the comment period.

On April 4, 1984, the Director, Division of Licensing, NRR, issued Generic Letter 84-08, advising all licensees, applicants for operating licenses, and holders of construction permits that the Commission had approved a plan for the management of plant-specific backfitting issues. The letter also advised that, until such time as public comments were received and the plan finalized, the staff would use the procedures set forth in draft Manual Chapter 0514 as interim guidance.

On April 13, 1984, the Director, DL, issued a memorandum to all project managers providing additional guidance on the handling of plant-specific backfit items. The memorandum provided nine additional paragraphs of clarification and reemphasis of the procedures contained in draft Manual Chapter 0514 and reiterated that they would be used as interim guidance for all plant-specific backfitting issues. In particular, the additional guidance advised that: (1) utility identified backfit issues should be brought to the attention of the Assistant Director, DL; (2) the utility should be informed by letter of its appeal rights; and thereafter, (3) the interim procedures should proceed as prescribed.

On April 20, 1984, draft Manual Chapter 0514 and the procedures for managing plant-specific backfits resulting from either licensing or inspection and enforcement activities were issued for public comment in the Federal Register. Since then, the public comments were received and evaluated, and the Commission met several times on the matter of managing backfits in general. A proposed rule for managing all backfits was issued for public comment on November 30, 1984. At the time of our report, the Commission had not completed action on the revised rule.

Based on public comments and Commission meetings on managing backfits, the Deputy Executive Director for Regional Operations and Generic Requirements (DEDROGR), began revising draft Manual Chapter 0514 in early 1984. A revised draft Manual Chapter was issued to all EDO Office Directors/Regional Administrators for comment on February 4, 1985. On April 12, 1985, the DEDROGR issued a revised draft Manual Chapter 0514 for interim implementation beginning May 1, 1985, superceding the interim procedures approved by the Commission in February 1984. The revised Manual Chapter includes two significant organizational changes: (1) making the EDO responsible to the Commission for plant-specific backfit actions; and (2) directing that the DEDROGR assure that process controls for overall agency management of the plant-specific backfit issues are developed and maintained. The revision also includes several procedural changes which will be discussed in a later section of this report.

Scope

Our review was conducted in accordance with generally accepted Government auditing standards at NRC Headquarters between January and March 1985. Because most backfit issues were identified during the reactor licensing process, we concentrated our audit on assessing NRR's implementation of the interim backfit procedures as approved by the Commission on February 8, 1984.

Our audit included discussions with NRR managers, Project Managers in the Division of Licensing and Technical Reviewers in the Divisions of Engineering and Systems Integration. We also reviewed documents relating to backfitting in general and for each of the backfit issues we sampled. In order to achieve an understanding of how backfit issues were identified and managed, we selected 22 of the 40 backfit issues being tracked by NRR at the time our audit began. Our sample included backfit issues on both Operating Reactors (OR) and plants in the Operating License (OL) review process and included issues that were in either the negotiation process, pending appeal, resolved prior to appeal, or resolved by appeal. (See Appendix IV.) Our sample included four of the issues identified as backfits by Duquesne Light Company

on Beaver Valley 2; however, we made a general review of all 15 backfit issues relating to Beaver Valley 2. We also reviewed the proposed revision to Manual Chapter 0514 dated February 4, 1985, and discussed it with the responsible DEDROGR staff. Based on our review of the draft, we provided preliminary comments on the revised Manual Chapter to the Director, Regional Operations and Generic Requirements Staff, on March 1, 1985.

We did not evaluate the technical merits of items identified as backfits nor did we attempt to determine whether they were backfits. Because of time constraints, we did not contact utility officials to obtain their opinions.

FINDINGS

Our review of the implementation of the February 1984 interim procedures for controlling plant-specific backfits showed principally that the interim procedures are not adequate. The effects of the inadequacies in the procedures are that the management of plant-specific backfit issues was not effective or efficient and most backfit issues were not resolved in the spirit we believe the Commission intended when the interim procedures were approved for implementation. We also have some concerns about the performance of the NRR staff on several backfit issues; however, we chose not to be critical of NRR staff conduct on specific backfit issues for three reasons: (1) we could not identify any intent to circumvent the policy or procedures on backfits; (2) the interim procedures themselves were inadequate and did not provide sufficient guidance to the staff; and (3) the interim procedures and the philosophy behind them were not clearly explained to the staff.

The Interim Procedures

The major problem we observed with the interim procedures approved by the Commission in February 1984 is that they are aimed almost exclusively at backfit issues identified by the staff before they are communicated to the utilities. Even the informal appeal procedures presume that the staff has already determined whether the issue is a backfit before it is communicated to the utility. Our review, however, showed that most backfit issues were not identified by the staff.

Our review of 22 backfit issues being tracked within the Office of Nuclear Reactor Regulation (NRR) showed that almost all were initially identified by utilities. The issues we reviewed were identified by utilities based on staff positions communicated to the utilities in the following ways:

- in the staff's requests for additional information during the OL review process;
- in draft Safety Evaluation Reports during the OL review process;
- in NUREG-0737, "Clarification of the TMI Action Plan;"
- in regional office inspections;
- in other NRC program office reviews, e.g., safeguards reviews by the Office of the Nuclear Material Safety and Safeguards; and

-- in routine licensing amendments.

We did not find any backfit issues in our sample that were identified by the staff and processed in accordance with the interim procedures prior to being communicated to the utilities. We did find some issues that were identified as potential backfits by Project Managers in NRR, but these issues were not handled under the interim procedures unless the utilities also raised the issues. Therefore, the staff did not pursue the issues as backfits if they were accepted by the utilities.

Because the procedures did not anticipate licensee identification of issues not previously identified by the staff, two important provisions were not addressed in Manual Chapter (MC) 0514. First, MC 0514 contained no guidance to the staff on how to handle issues identified by the utilities. Supplemental guidance issued by the Director, Division of Licensing (DL), to all project managers on April 13, 1984, did anticipate utility identification of new backfit issues; however, that guidance made the identification of an issue as a backfit and the appeal of the issue as a backfit two separate actions by the utility. This led to problems in some cases when a utility identified a staff requirement as a backfit, but did not specifically request an appeal meeting because the staff did not automatically schedule an appeal meeting unless such a meeting was specifically requested by the utility. Typically, when a utility declared an issue a backfit, it would request NRR management to review the issue in accordance with the backfit procedures. The staff would generally respond that the issue was a requirement, and dialogue between NRC and the utility would continue without any formal determination made as to whether the issue was a backfit, and no appeal meeting would be scheduled.

It would be unfair and inaccurate, however, to say that the staff did nothing to resolve those issues. The staff did pursue technical resolutions with the utilities through their regular channels of written correspondence, telephone conferences, and meetings. However, it appeared that the scheduling of appeal meetings was not necessarily endorsed or pursued by the staff as the most efficient and effective approach for resolving those issues. For example, of the 38 backfit issues closed out as of February 8, 1985, only seven were closed as a result of appeal meetings. The majority of the remaining issues were closed prior to any appeal meetings.

The second provision not in MC 0514 was that the procedures did not require an early decision as to whether an issue was or was not a backfit, because it was assumed that utilities would only appeal issues already determined by the staff to be backfits. As a result, many issues which were not backfits, or were not known to be backfits under the intent of MC 0514, were being tracked by NRR as backfits. Furthermore, in the absence of specific guidance, the staff was handling these issues as they handled the resolution of other technical differences with utilities -- through technical negotiation rather than through the appeal process. During this process extended negotiations sometimes took place between the utility and NRC staffs before first level appeal meetings were scheduled, or the utility and NRC staffs resolved the issue through the lengthy negotiations prior to an appeal meeting. In one recent case, the first level appeal meeting was held nearly nine months after the issue was identified by the utility. In another case, post-appeal discussions revealed that neither the NRC staff nor the utility were sure exactly what the issue was that was being appealed. In a third case, it

appears the NRR staff did not have a clear understanding of the utility's system that was affected by the "backfit." In all these cases, an early determination as to whether the issue was a backfit would have clarified the issues and expedited its resolution.

In reviewing the staff's actions on issues identified as backfits, the NRR tracking system shows that as of February 8, 1985, 38 issues had been closed out. Backfit issues were closed out if (1) specific action was taken resolving the issue, or (2) no formal appeal was initiated by the utility. Of the 38 issues closed out, 17 were closed by technical resolution; 9 were closed because the utility did not formally appeal; 7 were closed through appeal meetings; and the remaining 5 were closed by other actions, e.g., withdrawn, or referred to the CRGR. Descriptions of the staff's handling of several issues being tracked as backfits are shown in the Appendices to this report. Appendix I discusses two issues relating to Beaver Valley 2. Appendix II discusses a backfit issue involving NRR and another NRC program office. Appendix III discusses one issue resolved through the appeal process set out in MC 0514.

Based on our review of the staff's handling of 22 backfit issues, we identified improvements to the interim procedures in MC 0514 we believed were necessary. However, because MC 0514 was being revised at the time of our review we evaluated both the February 4, 1985, and the April 12, 1985, draft revisions in light of our findings. Areas in which we believe significant improvements have been made and areas in which we continue to have concerns are discussed in the following sections of this report.

Because of the wide interest in the handling of backfit issues relating to Beaver Valley 2, we believe a general comment in that regard is appropriate. Our detailed review of 22 backfit issues, including 4 involving Beaver Valley 2, plus a general review of the other 11 issues at Beaver Valley 2, showed that the way the staff handled backfit issues on Beaver Valley was typical of the staff's handling of issues identified as backfits on other plants. For this reason, we have not focused on the Beaver Valley issues in this report but have attempted to resolve the overall problems with the plant-specific backfit procedures.

Revised MC 0514

At the time of our review, the Deputy Executive Director for Regional Operations and Generic Requirements (DEDROGR) staff was revising MC 0514. We reviewed the revised draft dated February 4, 1985, to determine how it was being changed and whether those changes would resolve our concerns. We also discussed the results of our review and the February 4, 1985, draft MC 0514 with the DEDROGR staff responsible for its revision.

On April 12, 1985, the DEDROGR issued a revised draft MC 0514 for interim implementation on May 1, 1985, until the Commission completes action on the revisions to the backfitting rule in 10 CFR 50.109, and until the regional and headquarters seminars to explain the procedures to the staff are completed. At that time the interim guidance will be converted into a formal NRC Manual Chapter. We reviewed the April draft to determine what additional changes were being made to the procedures. We have reflected our views on the

April 1985 version of MC 0514 where appropriate throughout the remainder of this report.

We believe the revised Manual Chapter has three major improvements over the procedures contained in SECY 83-321. First, it requires the staff to perform a regulatory analysis of a staff identified backfit before the requirement is communicated to the utility. The interim procedures required informal appeals to the Assistant Director, Division Director, and Office Director before the regulatory analysis was performed. Under the interim procedures, a great deal of time could pass and a lot of pressure could be exerted on utilities before the regulatory analysis would be performed to determine if the requirement was justified.

The second improvement is that a provision has been included for addressing backfits identified by licensees. As noted before, the interim procedures only addressed backfits identified by the staff. Under the revised procedures, language has been added to the draft Manual Chapter stating:

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.

A third improvement is that MC 0514 now clearly specifies that when a utility declares an issue to be a backfit the first determination to be made within NRC is whether it is, in fact, a backfit. The procedures also require such determinations to be made and communicated to the EDO and the utility within 3 weeks after the receipt of the backfit identification. This change will assure that utility identified backfits are properly and expeditiously handled under the backfit procedures. It will also eliminate the problem experienced in the past where many issues which were not backfits or were not known to be backfits were being tracked as backfits by NRR; thus overstating the number of true backfits being appealed.

Based on our review, however, we believe the following additional changes are needed to MC 0514 to effectively control the imposition of plant-specific backfits by the NRC staff.

1. Procedures are needed for resolving disagreements within the NRC staff. The interim procedures imply unanimity within the NRC staff as to whether a requirement is a backfit. We observed disagreements between staff members in different NRC offices over whether requirements were backfits that were never addressed in the context of the backfit procedures.
2. Clearer guidance is needed to utilities specifying the form and content that an appeal of a backfit should take. For example, we believe utilities bear some responsibility when they identify a backfit to describe what they believe is the issue involved and why they think it is a backfit.
3. We believe the procedures should require the staff to notify the utility when the staff is considering whether an issue is a backfit. Our concern in this regard is based largely on instances we observed where Project Managers in NRR believed requirements imposed by other NRC offices were backfits. (For example, see Appendix II.) Resolution of those issues

was never achieved under the interim procedures. The problem in such cases is that if the utility is not notified that the staff is considering such requirements as backfits the utility may implement the requirement prematurely. The revised MC 0514 implemented in April 1985 now requires utilities to be "promptly informed in writing regarding the staff plans" when they appeal proposed backfits. However, it still does not require utilities to be informed of other staff backfit considerations which may affect them, but which they did not appeal.

4. The procedures should provide a mechanism whereby all offices are aware of backfit determinations made by other offices, to avoid duplicate and possibly conflicting backfit determinations on the same issue. For example, we reviewed one case in which one NRC office attempted to impose a requirement on a utility which another office had already considered and which the Commission had rejected.
5. The procedures need to be clarified as to whether plant licensing can proceed prior to final resolution of plant-specific backfits. The interim procedures provide that resolution of plant-specific backfits on operating reactors will not affect operation of the plants. For example, if a plant-specific backfit is identified during a plant's refueling outage, resolution of the backfit will not affect the plant's ability to go back into service. The revised procedures seem to contain the same provision in stating that "plant operations shall not be interrupted during the staff's evaluation and backfit transmittal process, or a subsequent appeal..."

However, even though the revised procedures also apply to plants in the operating license review process, it is unclear whether plant licensing can proceed without final resolution of plant-specific backfits.

Issuance of Proposed Rule and Manual Chapter

Another issue identified during our review, was the timing of the implementation of the revised procedures relative to the implementation of the revised backfit rule. While the staff is revising MC 0514, the Commission is considering revisions to 10 CFR 50.109, which establishes Commission policy on backfitting. One of the major proposed changes in the rule is the definition of a backfit. Under the current 50.109 a backfit is defined as

...the addition, elimination or modification of structures, systems or components of the facility after the construction permit has been issued. (emphasis added)

The proposed rule's definition of backfitting depends on the stage in the licensing process a particular reactor is in. Specifically, the proposed revision to 50.109 defines backfitting as the:

...imposition of new regulatory requirements, or the modification of previous regulatory requirements, applicable to a facility, by means other than rulemaking after: (1) The date of issuance of the construction permit for the facility for facilities having construction permits issued after the effective date of this rule; or (2) six months before the date of docketing of the OL application for the facility for

facilities having construction permits issued before the effective date of this rule; or (3) the date of issuance of the operating license for the facility for facilities having operating licenses.

One problem which this change appears to cause is that the date at which requirements were frozen for certain plants under the old rule (i.e., date of issuance of construction permit) will be changed under the new rule. For example, for plants in the OL review process when the rule is finalized, the backfit cut off date will move from the construction permit issuance date to six months before docketing the OL application. This is a period of several years which could encompass many regulatory changes. As a result, some requirements that would be backfits under the old rule will not, in some cases, be backfits under the new rule, but will be regulatory requirements. Because the revised procedures in MC 0514 are written to be consistent with the proposed new backfitting rule, not the existing rule, we believe procedures are needed to deal with these issues as they arise.

Other Observations Made During Audit

During our audit we identified three areas not requiring changes to the interim procedures in which we believe improvements are needed. These areas are (1) the need for procedures to resolve technical disagreements between the staff and utilities, (2) informing the staff and utilities of the revised procedures, and (3) the need for improved communication within the NRR staff.

Procedures for Resolving Technical Disagreements

During our audit of backfit issues we became aware that some issues did not appear to be backfit issues; rather, they appeared to be differences in technical opinion between the NRC staff and the utility as to how to satisfactorily implement a requirement. For example, of the ten operating reactor backfit issues we reviewed, five were items contained in NUREG-0737, "Clarification of Three Mile Island Action Plan." The interim procedures specifically excluded NUREG-0737 items from backfit assessments by the staff because those requirements were already approved by the Commission. In these cases, and others we observed, it appeared the issue being appealed was the technical resolution of the requirement rather than the requirement itself.

Part of this problem is attributable to the NRR staff because, in some cases, they incorrectly advised utilities they could appeal NUREG-0737 items under the backfit procedures. In other cases, this problem is attributable to the fact that there was no procedural requirement to make an immediate determination of whether an issue was a backfit. As a result, these issues continued to be tracked as backfits. In reviewing this issue, however, we questioned what happens to issues appealed as backfits which are determined not to be backfits.

While the interim procedures approved by the Commission in February 1984 and the February 4, 1985, proposed revision to the interim procedures were silent on this issue, the April 12, 1985, revised draft MC 0514 attempted to deal with it. That draft provides that if an issue is determined not to be a backfit, the Office Director/Regional Administrator having responsibility for the issue will deal with it in accordance with "appropriate office procedures." However, we could not find or satisfy ourselves that any formal

procedures exist to resolve technical disagreements between the NRR staff and utilities. We were informed by the Director, NRR, that the utilities are advised at the time their applications are docketed that if they have any objection to a requirement, they can appeal it; however, that appeal process is not formalized.

We believe that in the absence of formal procedures to resolve technical differences between the staff and utilities, the utilities were using the backfit procedures as an avenue to formalize their objections and obtain NRC management attention. If such procedures are not developed, we believe the utilities will continue to identify technical issues as backfits to obtain NRC management attention to the issue. We also believe the lack of such procedures results in issues being resolved through extended technical negotiations between the NRC and utility staffs. The longer such negotiations continue the more pressure exists for utilities to comply with the staff's position to avoid licensing or restart delays. By formalizing and distributing procedures for resolving technical differences between utilities and the staff we believe the identification of many inappropriate issues as backfits can be eliminated.

Informing the Staff and Utilities of Procedures

Another problem we observed is that it did not appear that the NRR staff had a comprehensive understanding of the interim procedures. Some of the staff and managers we talked to were aware the procedures existed, but not many had a thorough understanding of how they should be implemented. Staff knowledge of the procedures was critical because the procedures presumed that the staff would identify backfits and process them in accordance with the procedures before they were communicated to the utilities. We believe the staff's inadequate handling of backfit issues, especially those identified by the NRC staff, is at least in part due to their unfamiliarity with the procedures.

We note, however, that the DEDROGR staff began in April 1985 to hold meetings with the NRC staff at both Headquarters and the Regions to discuss and explain the revised backfit procedures. The DEDROGR staff believes, and we agree, that without having an understanding of the procedures, the staff cannot consistently and effectively implement them.

We also understand that the DEDROGR staff is planning to distribute the revised procedures to utilities and solicit their comments on the implementation of the procedures. We agree with the intent of this action but believe the staff should obtain industry comments before the revised procedures are implemented. For example, we believe they should consider holding regional meetings to discuss and receive comments from the industry, such as those held for NUREG-0737 and NRC's regionalization program.

NRR Staff Communication

Our review also showed the need for improved communication within the NRR staff on backfit issues. During our discussions with technical reviewers in NRR, we were told that they were not always advised that a utility had declared a particular issue a backfit. They said such communications, if they took place, would come from the Division of Licensing, usually at the Assistant Director or Branch Chief level.

The interim procedures intended that the staff, particularly the Technical Reviewers, would identify backfit requirements and the Project Managers would be responsible for managing and controlling the process to resolve backfit issues once they have been identified to the Division of Licensing. The information flow, therefore, was expected to be from the Technical Reviewers to Project Managers. Because almost all backfits were identified by utilities to the Division of Licensing, a system for sending information from Project Managers to Technical Reviewers was needed. This information flow did not always take place. For example, in one case, a Technical Reviewer said he was not aware that an issue had been appealed as a backfit until a meeting was held between the NRR and utility staffs. As noted earlier, even though a utility declares an issue a backfit, the NRR and utility staffs still continue their dialogue. We believe the result, in some cases, is that there is not a mutual understanding of the issue because the utility perceives the issue as a backfit and the technical staff is not aware of that position.

Conclusions

Based on our review of the staff's implementation of the interim procedures to manage and control plant-specific backfitting, we believe that the interim procedures are not adequate to effectively and efficiently manage backfits.

We believe the major problem is that the procedures as interim guidance lack the necessary specificity to allow the staff to adequately manage and control the backfits identified. We also had some concerns over the staff's conduct on some issues but we attributed those problems to weakness in the procedures and the lack of training for the staff.

The interim procedures were established to provide guidance on how to handle backfit issues identified by the staff prior to being communicated to utilities, but failed to take into account that backfits identified by utilities should be treated with some diligence. Therefore, many backfit issues identified by utilities were tracked by NRR without a prompt determination by management as to whether they in fact were backfits. In addition, appeal meetings were only scheduled for those backfits for which a specific written request was made by the utility rather than NRC initiating the action to resolve the issue in a more timely manner.

The procedures contained in the revised MC 0514, implemented on an interim basis on May 1, 1985, are a significant improvement over the interim procedures implemented in February 1984, but still need improvements. We believe the staff should assure that the utilities have adequate opportunity to review and comment on the revised procedures before they are finalized.

We believe additional procedures also need to be developed for (1) making backfit determinations resulting from the changed definition of backfit; and (2) resolving technical disagreements between utilities and the staff, especially for issues that are appealed under the backfit procedures but determined to be regulatory requirements and not backfits. We believe the development of the latter procedures has the potential for eliminating utility identification of inappropriate issues as backfits, since it would give them another avenue for appeal. Such procedures should also expedite resolution of technical disagreements.

Recommendations

1. We recommend the EDO assure that the additional improvements to MC 0514 we identify on pages 7 and 8 of our report are included in the revision to MC-0514.
2. We recommend that the EDO provide guidance to Office Directors/Regional Administrators as to how issues which would be backfits under the current definition in 10 CFR 50.109 but which will not be backfits under the revised definition of backfits in revised MC 0514 are to be handled.
3. We recommend that the Director, NRR, develop formal procedures for resolving, in a timely manner, technical disagreements between the NRR and utility staffs, especially as they relate to issues identified by utilities as backfits but determined by NRR not to be backfits.
4. We recommend that the DEDROGR staff hold regional meetings with utilities to explain the revised plant-specific backfit procedures and receive their comments prior to finalizing MC 0514.
5. We recommend that the Director, NRR, establish procedures to keep all responsible staff within NRR fully informed on issues appealed as backfits.

AGENCY COMMENTS

On June 20, 1985, the EDO commented on a draft of this report. A copy of the EDO's response is shown as Appendix V. Our assessment of the EDO's comments on our recommendations follows.

In regard to our recommended further improvements to draft MC 0514, the EDO agreed with three parts and disagreed with two parts. The EDO agreed to provide clearer guidance to utilities on the form and content of a backfit appeal (item 2 page 7), indicated that the Plant-Specific Backfit System will assure all offices are aware of backfit determinations by other offices (item 4 page 8), and agreed to clarify the Manual Chapter regarding whether reactor licensing can proceed prior to final resolution of plant-specific backfits (item 5 page 8).

The EDO did not agree to include procedures in MC 0514 for resolving disagreements within the NRC staff regarding backfit issues (item 1 page 7). He indicated that he believed it inappropriate to address conflict resolution, a management function, in a policy document such as MC 0514. He further indicated that the responsible manager will take appropriate steps to resolve conflicting views regarding backfits when they are presented. While we agree that conflict resolution is a management function we observed instances during our audit in which that function was not carried out. We continue to believe it would be appropriate to include general guidance in MC 0514 on resolving disagreements. We will, however, reevaluate the need for additional procedures of this type during our follow-up audit.

The second area in which the EDO disagreed with suggested changes to MC 0514 was in regard to notifying utilities when the NRC staff is considering whether an issue is a backfit (item 3 page 7). The EDO's disagreement is based

principally on the position that if the staff is considering an issue a backfit, it has not yet been imposed on the licensee and can not, therefore, be prematurely implemented by the utility. We disagree and point to the example detailed in Appendix II of our report, in which some NRR staff believed a requirement already imposed by NMSS on a utility was a backfit, as the type of problem we are attempting to resolve. We did not mean to imply in our recommendation that anytime NRC was considering an item as a backfit, all or any utilities needed to be notified. There are, however, specific instances in which we believe utilities should be notified. We urge the EDO to reconsider his disagreement with the recommendation in light of the example provided.

The EDO disagreed with our Recommendation 2 regarding the need for guidance on handling issues which are not backfits under the new definition in MC 0514 but are backfits under the definition in 10 CFR 50.109. The EDO's response states that there is no ambiguity needing clarification regarding the definition of a backfit in MC 0514. We believe this response misses the point of our recommendation. Our concern is not that MC 0514 is unclear but rather that the definition of a backfit in MC 0514 is in conflict with a rule currently in existence (10 CFR 50.109). The effect of the change in definition is to automatically backfit on reactors in the licensing process many regulatory requirements established after the reactors got their CPs, and not allow utilities to appeal those backfits under the procedures in MC 0514. For example, prior to implementation of draft MC 0514 on May 1, 1985, the backfit cut off date for plants in the licensing process was the date of CP issuance. On May 1, 1985, the backfit cut off date was moved forward to six months prior to docketing for the operating license review. By changing the definition in this way all applicable requirements issued by NRC between the plant's CP date and its FSAR docketing date become requirements and can, presumably, be imposed by the staff without following MC 0514 procedures, or consulting the CRGR. We believe that is not appropriate.

Since receiving the EDO's comments on our draft report, we have briefly discussed Recommendation 2 with a member of the DEDROGR staff to ensure that the DEDROGR staff fully understood our position when they prepared the response to our recommendation. That staff member basically stated that since 10 CFR 50.109 has never been used the change as now defined in MC 0514 does not have any effect on those plants in the licensing process. He agreed, however, that there are issues which may have been considered backfits under 10 CFR 50.109 which will not be backfits under the definition in MC 0514 and can not be appealed under that manual chapter.

We believe that Recommendation 2 involves a complicated policy issue in which the implications of our recommendation and the effect that MC 0514 may have on OL applicants is not fully understood, at least to our satisfaction. We will pursue resolution of this matter further and if agreement can not be reached, we will elevate the recommendation to the Commission for resolution.

The EDO generally agreed with our Recommendations 3, 4, and 5 and indicated that action had been, or would be, taken to implement the recommendations. We will assess the adequacy of the actions taken on the recommendations during our follow-up review.

DUQUESNE LIGHT COMPANY

Our review showed that Duquesne Light Company (the utility) declared 15 issues relating to Beaver Valley 2 as backfits in four separate letters to NRC between May 30, 1984 and November 8, 1984. The issues were identified by the utility in response to the NRC staff's requests for additional information and/or the staff's position in the draft Safety Evaluation Report (SER). As of March 8, 1985, 9 of the 15 backfit issues had been resolved to the satisfaction of both the staff and utility prior to any appeal meetings. The remaining six issues are pending a first level appeal meeting which, for Beaver Valley 2 only, is being headed by the Director, Division of Licensing, NRR.

We generally reviewed all 15 issues involving Beaver Valley 2; however, we reviewed four issues in detail. Following is a brief description of the staff's handling of two backfit issues at Beaver Valley 2. Based on our review, we believe these examples typify the staff's handling of all issues for Beaver Valley 2. Furthermore, based on our review of 22 backfit issues, we believe the staff's handling of the Beaver Valley issues was typical of the staff's handling of other backfit issues on other plants.

Probable Maximum Precipitation

Perhaps one of the most frequently discussed issues in terms of plant-specific backfits is the Probable Maximum Precipitation (PMP) issue at Beaver Valley-2. At the center of this issue is the question of whether the NRC staff's use of two new National Weather Service (NWS) reports to determine PMP values and distribution constituted a backfit and should have been reviewed and approved in accordance with the interim procedures in draft MC 0514, or is legitimate regulatory guidance within the Standard Review Plan (NUREG-0800). The two NWS reports are "Probable Maximum Precipitation Estimates - United States East of the 105th Meridian", June 1978 and "Application of Probable Maximum Precipitation Estimates - United States East of the 105th Meridian", August 1982, and are referred to as HMR 51 and HMR 52, respectively. A chronology of how PMP came to be appealed by the utility as a backfit follows. It is important to keep in mind that the interim backfit procedures were implemented by NRR in October 1983.

In late August 1983, the NRR staff informed the utility by letter that the utility had used a 1956 National Weather Service report--HMR 33--to estimate PMP. In view of the availability of HMR 51 and 52, the staff asked the utility to evaluate their site drainage using the newer reports. On November 15, 1983, the utility notified the Director, Division of Licensing, in writing that the NRC request for additional information revises the Standard Review Plan (SRP) criteria without following NRR procedures for such revisions, and that the NRC questions should be rescinded. The Assistant Director for Licensing responded to the utility on April 11, 1984, that the staff had reviewed the utility's letter of November 15, 1983, and concluded that the request for additional information was in conformance with the SRP and reflected a valid safety concern.

The contention between the NRR staff and the utility was whether the NRR staff's use of HMR 51 and 52 was in conformance with the SRP. The utility's

position was that the NRR staff had violated their own policy and procedures, which state, "Staff reviewers should not decrease or go beyond the scope and requirements of any specific SRP section." The NRR staff position was that the SRP "Review Procedures" were flexible and provided that the staff should use the most current analytical methods available, i.e., HMR 51 and 52.

In a May 30, 1984, letter to the Director, Division of Licensing, the utility requested that the proposed backfit requirement be reviewed by NRC management in accordance with the provisions of Generic Letter 84-08, which notified utilities that the staff was using the interim backfit procedures.

During this same period of time, the PMP issue was also being pursued by Niagara Mohawk Power Corporation in regard to their Unit 2 at Nine Mile Point. The issue was first raised in regard to Nine Mile Point in a December 29, 1983, memorandum to the Director, Division of Licensing, from the NRR Project Manager for Nine Mile Point stating that PMP was a potential backfit issue and was applicable to seven other reactor sites, including Beaver Valley. Apparently, no action was taken at that time.

On May 11, 1984, Niagara Mohawk Power notified NRR management that the staffs' use of HMR 51 and 52 went

...beyond the current Standard Review Plan requirement since these reports are not referenced in the Standard Review Plan explicitly. We request the Nuclear Regulatory Commission Committee for the Review of Generic Requirements review this generic new requirement to determine if Hydromet [HMR] 51 and 52 are applicable to the Nine Mile Point Unit licensing base.

In a letter dated July 10, 1984, the Director, Division of Licensing, informed Niagara Mohawk Power that the staff's use of HMR 51 and 52 was in conformance with the SRP and that if they still objected, they had the right to appeal as prescribed in Generic Letter 84-08.

In reviewing some of the internal NRC correspondence regarding the PMP issue, we found that Niagara Mohawk Power was not alone in believing PMP was a new generic requirement. In a memorandum dated May 8, 1984, the DEDROGR requested the Director, NRR, to provide information on the use of HMR 51 and 52 and whether it constituted an issue appropriate for review by the Committee to Review Generic Requirements (CRGR). By memorandum dated June 25, 1984, the Director, NRR, informed the DEDROGR that the staff's use of HMR 51 and 52 was appropriate and that the ambiguity of the SRP was being revised as a "Type I revision" (i.e., clarification) and, therefore, CRGR review was not necessary.

In a letter dated August 8, 1984, the DEDROGR informed the Director, NRR that:

Your memorandum was helpful in explaining the conduct of PMP calculations over the last few years. The memo also unequivocally states that the newer data and techniques provided by the most recent National Weather Service reports which you would use "...have the effect of increasing the calculated PMP at specific sites." A change in staff practice to use such reports then cannot be treated as merely clarification and removal of ambiguities. I believe that the most recent proposed SRP changes, and the recent licensing

review actions to impose the use of the new National Weather Service reports on NTOLs, together evidence a new staff position or at least a new interpretation of a prior staff position, one which could have a significant impact on a number of NTOL applicants whose plants are in late stages of construction with essentially all flood protection features in place. Such a new interpretation is subject to CRGR review as stated in the CRGR Charter, Section III B.

The NTOLs have presumably met PMP requirements reviewed and approved at the CP stage. The application of the newer calculation methods should result in some incremental reduction in risk at some cost to each applicant. Whether or not imposition of the revised position is an unnecessary regulatory burden to be avoided for certain classes or groups of plants is a question the CRGR was chartered to address.

For the reasons I have stated, I believe that the PMP issue should come before the CRGR unless the total impact on industry and the NRC is demonstrably insignificant. Please let me know your plans.

Finally, on October 10, 1984, the Director, NRR, informed the DEDROGR that he instructed the staff to proceed with the preparation of a CRGR package for review and had suspended further routine requests to applicants to review their site flooding assessments under the new NWS guidelines pending the outcome of the CRGR review. However, the Director stated that the NRR staff would conduct its own PMP preliminary assessment of the facilities using the new reports and only those facilities having demonstrable potential site flooding problems would be subject to further evaluation. Our understanding is that the staff would continue to pursue PMP determinations on a plant-specific basis if their own assessments indicate potential site flooding problems.

However, in the mean time, Niagara Mohawk Power by letter dated September 9, 1984, agreed to perform their analysis using HMR 51 and 52 and to incorporate any necessary modifications.

In regards to the PMP issue at Beaver Valley 2, after the utility identified the issue as a backfit in May 1984, the NRR staff continued to pursue the issue and request that the utility submit their analysis using HMR 51 and 52. As of November 1984, a month after the Director, NRR, agreed to send the PMP issue to the CRGR, the staff and the utility were still exchanging correspondence regarding the PMP issue.

In a memorandum dated November 6, 1984, the Assistant Director for Licensing forwarded to the utility the NRC staff's position on PMP and eight other backfit issues and the safety significance the staff attached to each of the requirements. These were intended to be used by the utility to prepare for an appeal meeting. In response to the staff's positions, the utility wrote to the Director, Division of Licensing, on November 20, 1984, that:

DLC (Duquesne Light Company), as evidenced in the individual attachments, perceives the need for further clarification, of the requirements and their justification, in order to facilitate meaningful appeal meetings. In many of the attachments there is no precise

statement of the requirements that the reviewers wish to impose. Further, since some of the implied requirements are not consistent with the most recent positions of the staff reviewers, DLC is not certain that the requirement has been sufficiently stabilized to ensure productive discussion of the merits of the issues.

DLC believes that NRR has developed a very workable procedure (Enclosure 2 of GNLR [Generic Letter] 84-08) to implement the requirements of NRC Manual Chapter 0514. We believe NRR's procedure intends that the appeal meetings provide a forum for evaluating the postulated increase in plant safety to determine whether the new requirement should be imposed. Without a clearly stated requirement and without an outline of the rationale by which the staff concluded that the proposed requirements provides a needed increase in safety, beyond that provided by existing regulations, DLC is unable to formulate and submit the well-defined position which is requisite to productive discussion of these issues.

An appeal meeting to discuss PMP at Beaver Valley 2 was scheduled for March 28, 1985; however, it was postponed. In lieu of the appeal meeting, we understand that the NRR technical staff and the utility representatives scheduled a technical meeting to discuss the NRR staff's analysis using HMR 51 and 52.

In a staff summary of ten plants that had been requested to analyze their site and roof drainage using HMR 51 and 52, six showed that their designs met HMR 51 and 52 with only some modifications. Three met both site and drainage requirements without any modifications. Because Beaver Valley 2 appealed the requirement, the report did not indicate what modifications were required there. Beaver Valley 2 is the only one of the ten plants that appealed the use of HMR 51 and 52 under NRC's backfit procedures.

Based on our review, we believe NRR management acted incorrectly when it did not refer the PMP issue to the CRGR when first identified in December 1983 by an NRR Project Manager. We also believe the staff should have scheduled a first level appeal meeting for Duquesne Light shortly after Duquesne Light requested that PMP be handled under Generic Letter 84-08 on May 30, 1984.

Steam Generator Level Control and Protection

Another of the Beaver Valley 2 issues we looked at was the "Steam Generator Level Control and Protection" design. This issue arose in response to the NRR staff position in the draft Safety Evaluation Report (SER) dated February 1984. The draft SER stated that this "...design for actuation of feedwater isolation does not meet the requirements of Paragraph 4.7 of IEEE-279, 'Control and Protection System Interaction', in that the failure of the level channel used for control could require protective action and the remainder of the protection system channels would not satisfy the single-failure criterion."

The utility responded to the draft SER in a letter of March 28, 1984, to the Licensing Branch Chief, Division of Licensing, providing their position on this issue and stating that IEEE Standard 279 was not applicable because their analysis in the Beaver Valley Unit 2 Final Safety Analysis Report (FSAR)

demonstrated adequate protection even if all staff postulated failures occur. On May 8, 1984, NRC responded that the utility would need to modify the steam generator level control design to comply with IEEE-279 or provide an analysis showing that the consequences of feedwater addition are not safety significant. On May 30, 1984, Duquesne Light Company declared the issue a backfit under Generic Letter 84-08.

The NRR Branch Chief having the technical review responsibility for this area told us the Steam Generator level control design is not a backfit issue for Beaver Valley 2. He stated that it is a regulatory requirement and that compliance with IEEE-279 is referenced in 10 CFR 50.55a, Codes and Standards, subparagraph (h) protection systems. However, the requirement is being imposed for Unit 2 and not Unit 1 which is an operating reactor. He said the applicability of this requirement to operating reactors is being studied in Unresolved Safety Issue A-47 "Safety Implications of Control Systems." According to the Branch Chief, at the time of issuance of the operating license for Unit 1 and the construction permit for Unit 2, steam generator overfill was not considered safety significant, consequently the steam generator high level produced feedwater isolation and turbine trip function was not deemed to be a engineered safety feature; therefore, IEEE-279 was not applied to this issue. The utility's declaration of the issue as a backfit is based on the fact that IEEE-279 was not applicable at the construction permit stage.

The NRR monthly status reports on backfits show that after the utility's May 30, 1984, declaration of this issue as a backfit, the NRR staff and utility continued their communications over the next eight months without either a formal determination by NRR management as to whether the issue was a backfit, or a first level appeal meeting being scheduled to establish a timely resolution. An appeal meeting at the Division Director level was scheduled for April 19, 1985.

In this case, we believe the staff's failure to arrange a first level appeal meeting for about eleven months was excessive and meant that even as of April 1985 a formal determination had not been made by NRR as to whether IEEE-279 applied to Beaver Valley 2.

POTENTIAL BACKFITS RELATED TO ANOTHER
NRC PROGRAM OFFICE

As part of our review we also looked at some backfit issues that resulted from actions by NRC program offices other than NRR. One of these was a safeguards issue at Turkey Point Units 3 and 4, that was identified as a backfit by the NRR Project Manager in August 1983.

Our review of documents and discussions with NRR officials showed that this issue resulted from a Regulatory Effectiveness Review (RER) conducted by the Office of Nuclear Material Safety and Safeguards (NMSS). The objectives of the RER program are, broadly, to assess the effectiveness of NRC's safeguards regulations. RER's are suppose to be independent of the licensing and inspection functions.

By letter dated May 12, 1983, a Branch Chief, Operating Reactors, DL, informed Florida Power and Light Company that NMSS' Division of Safeguards would conduct a Safeguards Regulatory Effectiveness Review at Turkey Point Nuclear Power Plant, Units 3 and 4, during May 23-27, 1983. The utility was informed that the purpose of the review was to evaluate the overall effectiveness of Turkey Point's security program and to determine whether existing safeguards regulations yield the level of protection intended by NRC. According to documents we reviewed, the licensee was provided a draft of the RER review at an exit meeting held at the site on May 27, 1983.

The Project Manager for Turkey Point told us the RER really did not look at the effectiveness of the safeguards regulations. Rather, the NMSS team evaluated the utility's site security against the regulations and identified areas that the licensee needed to upgrade. The Project Manager identified the issues related to the RER reports as backfits in a memorandum dated August 29, 1983, to the Chief, Standardization and Special Projects Branch, DL (the Branch responsible for NRR interface and coordination with NMSS on reactor safeguards).

The Chief, Standardization and Special Projects Branch, was also informed by other NRR staff members that the RER conducted at Turkey Point and the resulting reports presented regulatory problems. In a memorandum dated August 23, 1983, the Chief, Auxiliary Systems Branch, Division of Systems Integration, NRR, informed the Chief, Standardization and Specials Projects Branch, that the RER reports for Turkey Point imply backfit of requirements beyond present requirements. He stated that the purpose of the onsite reviews was to assess the effectiveness of reactor safeguards against radiological sabotage and to determine whether existing NRC regulations yield a level of protection intended by NRC, but that the RER report at Turkey Point was mainly an assessment of the plant's safeguards program. That is, there was no comparison to the regulations and no evaluation of the effectiveness of the regulations. He further commented that the report conclusion does not identify whether the deficiencies were caused by inadequate implementation of the regulation or inadequate regulations.

In another memorandum, dated September 6, 1983, an NRR Technical Reviewer, who accompanied the RER team as an observer during their site review, stated that the review appeared to meet the intended objectives, but there did not seem to

be a regulatory basis from which to require changes to the site's security measures.

By memorandum dated November 8, 1983, the Director, Division of Licensing (DL) informed the Director, Division of Safeguards, NMSS, that one of NRR's specific concerns with the Turkey Point RER was trying to adapt it into the licensing process. The Director, DL, commented further that the report as written, implied that the licensee is required to take prompt remedial action to correct items identified as "Safeguards Program Concerns." In reviewing the RER for Turkey Point, the Director, DL, stated "The only basis we could identify in the RER report for requiring these changes is 'the teams judgement.' In our opinion, this is inadequate justification for taking a licensing action."

The Project Manager commented on the revised RER reports, in a memorandum dated February 6, 1984, to the Chief, Standardization and Special Projects Branch. In that memorandum the Project Manager stated that both the RER program and report on Turkey Point are actions that may be considered to be backfits and should be handled in accordance with the interim backfit procedures. However, as is shown below, documents during the period from February to July 1984, both within NRR and between NRR and NMSS, showed that the issue was not handled in accordance with the interim procedures.

On March 6, 1984, the final RER reports for Turkey Point were sent to Florida Power and Light Company for their review and comment. The utility was specifically requested to provide comments relative to those areas needing attention. To assist the utility in their consideration of the findings, the NRC staff provided some suggestions as to possible corrective measures.

By memorandum dated April 2, 1984, the Director, Division of Licensing, informed the Director, Division of Safeguards, NMSS, that he continued to be concerned about the impact and implementation of the recommended actions identified in the RER reports. The Director, Division of Licensing, recommended that actions resulting from the RER reviews be presented in a format and context that is fully compatible within the regulatory framework. He further suggested that the RER actions be developed and addressed in five discrete categories, each of which is applicable to a prescribed regulatory course of action and an identifiable responsible group.

On May 7, 1984, the Project Manager informed the Assistant Director for Operating Reactors, NRR, that, in accordance with the April 13, 1984, directions from the Director, Division of Licensing, that all Project Managers should report all potential backfits to their cognizant Assistant Director, the RER reports for Turkey Point are actions that may be considered to be backfit items. In addition, the Project Manager stated that he did not believe or was aware that the RER Program, as implemented and documented in the Turkey Point Report, is in conformance with SECY 83-321 (the interim backfit procedures). Furthermore, the Project Manager reported that similar reports for RERs conducted at the North Anna and Surrey nuclear reactor sites had been returned to NMSS for reconsideration based on the same concerns identified in the Turkey Point reports.

In a memorandum dated May 31, 1984, on the status of the backfit issue at Turkey Point, the Project Manager informed the Assistant Director for

Operating Reactors that the utility had not formally indicated what actions they would take, but had expressed concerns about the RER reports. Their concerns were based on the lack of basis provided for requiring prompt corrective action, when findings of no potential sabotage vulnerabilities were identified in the reports, and the fact that they have an NRC approved security plan for the site.

According to the monthly status reports on backfit issues and our discussion with the Project Manager and other NRR officials, the utility agreed during a meeting on July 12, 1984, to implement the corrective actions suggested in the RER reports. We are not aware of any correspondence from the utility questioning the backfit implications of this safeguards review. Furthermore, NRR officials told us that the utility was not informed that the RER issues had been identified as a potential backfit issue within NRR. An NRR official said that he believed that claiming the RER reports as potential backfits may have been premature, and that the utility should first have an opportunity to review the reports and make their own determination. Additionally, if the utility views the reports as being beneficial to their safeguards programs and they willingly commit to taking corrective action, then NRC should let them have that choice.

According to an NRR memorandum dated November 30, 1984, 11 reactor units have undergone RER reviews since the inception of the program, and 10 reactor sites are scheduled for FY 85. Beaver Valley Units 1 and 2 are scheduled for RER reviews in April 1985.

We believe this case exemplifies a failure to implement the backfit procedures in that an issue identified as a backfit by a Project Manager on three occasions was never handled as a backfit as intended by MC 0514. We believe the problem is directly related to the lack of guidance in the procedures governing backfits identified in one office relating to a requirement imposed in another office. This supports the need for improved procedures governing interoffice coordination on resolution of backfit issues.

This case also exemplifies the staff's attitude that a backfit does not exist if a utility voluntarily implements a staff requirement. An appendix to the revised MC 0514 attempts to correct this problem by stating that utility willingness to implement a backfit requirement does not eliminate the fact that it is a backfit and must be handled under MC 0514.

BACKFIT ISSUE RESOLVED THROUGH
THE APPEAL PROCESS

As part of our audit, we reviewed some backfit issues that were resolved through the appeal process. One such issue related to Arizona Public Service Company's Palo Verde Units 1, 2, and 3 and was resolved by appeal at the Assistant Director level in NRR.

According to the Project Manager this issue started back in mid 1982 as a staff request for additional information and was never really considered a backfit by the utility. The decision to treat the issue as a backfit was a joint decision by the Project Manager and the technical assistant to the Director, Division of Licensing.

In a memorandum dated June 11, 1982, the Licensing Branch Chief informed the utility that in the course of NRR's review of the alternate safe shutdown capability for Palo Verde in the event of a fire (Appendix R, Section III. L), it was determined that the alternate shutdown system (remote shutdown panel) for the plant did not include the capability to monitor reactivity or verify adequate core cooling during natural circulation flow. Furthermore, an alternate shutdown system is required in the event of control room evacuation due to a fire. The utility was instructed to provide a source range neutron flux monitor and either an indication of the reactor coolant loop cold leg temperature, or reactor coolant average temperature as part of the available instrumentation for the remote shutdown panel, or at an alternate location independent of the control room.

In their response of May 17, 1983, the utility contended that Palo Verde was not required, nor did they commit, to meet 10 CFR 50, Appendix R, Section III.L. However, in order to further enhance the safety of Palo Verde in the event that the remote shutdown panel is needed, the utility agreed to install an instrument which would provide a direct indication of the reactor coolant loop cold leg temperature on the remote shutdown panel.

The utility concurrently responded to NRR's request that Palo Verde provide a source range neutron flux monitor on the remote shutdown panel. However, the utility held that their existing design allowed adequate reactivity control outside of the control room, thus precluding the need for a source range neutron flux monitor.

The NRR staff reviewed the position taken by Palo Verde with regard to the need for a source range neutron flux monitor on the remote shutdown panel concluding that they disagreed with Palo Verde's position. In a letter dated July 28, 1983, the staff requested that the utility revise their response to include a direct capability for monitoring source range flux from the remote shutdown panel.

On November 23, 1983, the utility responded to NRR's evaluation of their position by reiterating that no source range neutron flux monitor is needed on Palo Verde's remote shutdown panel. Further, in a letter dated February 14, 1984, the utility again maintained that their existing design was adequate and requested that, if NRR did not accept their position, an appeal meeting be scheduled to resolve the situation.

An appeal meeting was held on May 31, 1984 at NRC Headquarters with representatives of the utility. On June 25, 1984, the Assistant Director, DL, concurred with the utility's position based on available compensatory measures.

SUMMARY OF BACKFIT ISSUES REVIEWED DURING OIA AUDIT

FACILITY	DESCRIPTION OF BACKFIT ISSUE	NUREG 0737 ITEM (Y/N)	DATE IDENTIFIED AS A BACKFIT	BACKFIT IDENTIFIED BY	APPEAL CHRONOLOGY	STATUS AS OF MARCH 8, 1985
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APPLICATIONS FOR OPERATING LICENSE

Beaver Valley Unit 2	Applicant's fire suppression system design in its cable spreading room is a deviation from the Standard Review Plan (section C.7.c. of Branch Technical Position CMEB9.5-1) and is not justified, as required by 10 CFR 50.34(g). Applicant believes their CO ₂ fire suppression system meets the intent of BTP-CMEB 9.5-1 and complies with 10 CFR 50 requirements.	N	5/30/84	Utility	2/28/85 Division Director Meeting	3/13/85 Division Director Site Meeting
Beaver Valley Unit 2	Applicant's steam generator level control design does not meet Institute of Electrical and Electronics Engineers (IEEE)-279 which is required since steam generator level function is included in Final Safety Analysis Report (FSAR) (Ch.15) analysis. Applicant states IEEE-279 not required since core protection is maintained even if all staff postulated failures occur.	N	5/30/84	Utility		4/19/85 Division Director meeting pending

Beaver Valley Unit 2	Staff believes applicant should use the latest available, Hydrometeorological Reports (HMR) 51 and 52, to determine probable maximum precipitation (PMP) values and to evaluate site drainage. Applicant maintains that such a change in evaluation criteria is beyond applicable Standard Review Plan criteria.	N	5/30/84	Utility	3/28/85 Division Director meeting
Beaver Valley Unit 2	Staff feels that Licensee's calculated dose projection values at the Exclusion Area Boundary (EAB) exceed requirements established by 10 CFR 100. Applicant feels staff is requiring them to use different methods of calculation to reduce x/q values so that lower dose projections can be achieved.	N	11/8/84	Utility	3/29/85 Safety Evaluation Report (SER) will close issue to satisfaction.
Nine Mile Point Unit 2	The applicant should use Hydrometeorological Report 51 and 52 to establish PMP. Applicant maintains that their use of HMR 33 is sufficient to determine Probable Maximum Precipitation.	N	12/29/83	NRC Project Manager	Closed 9/9/84 per applicants commitment to use HMR 51 and 52 to determine PMP.
Palo Verde	Applicant should provide a source range neutron flux monitor in the remote shutdown panel for direct indication of reactivity to satisfy Appendix R requirements. Applicant disagrees that Appendix R applies to OL's.	N	5/17/83	Utility	5/31/84 AD Meeting Closed 6/25/84 AD position concurring with licensee's position. Licensee commitment to send confirmatory probabilistic risk assessment.

LaSalle Units ¹ 1/2	Applicant is required to apply General Design Criteria (GDC) to fire protection systems and equipment. Applicant does not believe that GDC 1 is applicable with SRP 9.5.1 supporting its position.	N	1/27/84	Utility	3/28/84 AD Meeting	Closed 6/14/84 with Licensee's commitment to abide by generic resolution of issue.
LaSalle Units ¹ 1/2	Applicant is required to comply with all aspects of National Fire Protection Association (NFPA) codes. Applicant believes compliance is only required in those cases where specific commitments have been made; otherwise engineering judgement can be used.	N	1/27/84	Utility	3/28/84 AD Meeting	Closed 3/28/84 with staff's acceptance of licensee's commitment to identify codes that are applicable to LaSalle.
LaSalle Units ¹ 1/2	Applicant is required to perform periodic surveillance tests on fire pumps and dampers. The applicant feels this goes beyond acceptance criteria in NRC Boiling Water Reactor Standard Technical Specifications.	N	1/27/84	Utility	3/28/84 AD Meeting	Closed 6/14/84 when licensee committed to meet or exceed Standard Technical Specification requirements and to submit testing program by 8/22/84.
LaSalle Units ¹ 1/2	Applicant is required to comply with National Fire Protection Association 51b training requirements for fire watches. Applicant does not believe this guidance document presents a formal requirement.	N	1/27/84	Utility	3/28/84 AD Meeting	Closed 6/14/84. Licensee committed to implement a "hands on training" by 12/31/84.

Note: ¹ Issue initially identified during NRC Region III readiness review meeting on November 30, 1983.

SUMMARY OF BACKFIT ISSUES REVIEWED DURING OIA AUDIT

FACILITY	DESCRIPTION OF BACKFIT ISSUE	NUREG 0737 ITEM (Y/N)	DATE IDENTIFIED AS A BACKFIT	BACKFIT IDENTIFIED BY	APPEAL CHRONOLOGY	STATUS AS OF MARCH 8, 1985
<u>OPERATING REACTORS</u>						
Dresden Unit 2	Concern whether purge and vent valves would close in the event of a design-basis accident (DBA) loss-of-coolant accident (LOCA). Staff feels valves should be sealed closed in accordance with Standard Review Plan 6.2.4. II.6.f during modes 1-4.	Y	12/30/83	NRC Project Manager	N/A	Closed 2/11/85
Millstone Unit 2	Staff feels the licensee should ensure that hydrogen purge system valves receive a closure signal from a radiation monitor. Licensee maintains that there is no justification for closure on radiation.	Y	5/14/84	Utility	N/A	Closed 1/14/85 per licensee revised analysis.
Turkey Point ² Units 3/4	Licensee is required to provide prompt corrective action on upgrade of vital area alarm system and barriers. Licensee believes there is a lack of basis for this requirement since no potential sabotage vulnerabilities exist in the Regulatory Effectiveness Review (RER) and Vital Area Validation Report	N	8/12/83	NRC Project Manager	N/A	Closed 7/12/84 per Licensee's commitment to comply with staff's position during quarterly meeting.

Note: ² Issue identified by NRR project manager as result of reports on RER.

Turkey Point ² Units 3/4	Licensee is required to identify new vital areas. Licensee maintains the prior approved security plan is sufficient.	N	8/12/83	NRC Project Manager	N/A	Closed 7/12/84 per Licensee's commitment to comply with staff's position during quarterly meeting.
Kewaunee	Licensee is required to upgrade Radiological Environmental Technical Specifications to meet the intent of Appendix I. Licensee contends its Technical Specifications are adequate.	N	5/22/84	Utility	N/A	Closed 8/1/84 per Licensee's commitment to implement staff's recommendations.
Kewaunee	Licensee is required to upgrade Technical Specifications on engineered safety feature (ESF) filters. Licensee maintains that existing Technical Specifications are adequate.	N	5/22/84	Utility	N/A	Closed 8/1/84 per Licensee's commitment to implement staff's recommendations.
Shoreham ³	Applicant is required to install additional sump pumps since extreme flooding will knock out all emergency core cooling system components because of containment design. The applicant does not want to install additional pumps.	N	12/15/83	NRC Project Manager	N/A	Closed 4/30/84. Reliability and Risk Assessment recommended procedure modifications instead of hardware modifications. Issue referred to Region I for monitoring.
Shoreham ³	Applicant is required to pipe discharge in a collection system since main system isolation valve (MSIV) leakage control system discharges directly into secondary containment atmosphere. The applicant does not want to pump discharge back into primary containment.	N	12/15/83	NRC Project Manager	N/A	Closed 7/2/84 via Region I memo to Director, Division of Licensing; issue now part of Generic Issue C-8.

Note: ³ Issue initially identified by NRC Region I in memo of June 8, 1982 to Director, Division of Licensing, NRR.

Maine Yankee	The staff has requested that turbine-driven auxiliary feed-water pump be automatically started. Licensee believes the current manual start capability is adequate.	Y	9/28/84	Utility	11/8/84 AD meeting; new information provided by utility 3/15/85-Revised technical staff position due.	AD position due 4/15/85
Maine Yankee	Staff has requested a limiting condition for operation on the turbine-driven auxiliary feed-water pump not to exceed 7 days. Licensee maintains no limiting condition for operation is needed. Current limiting condition for operations on motordrive pumps are adequate.	Y	9/28/84	Utility	11/8/84 AD meeting; new information provided at meeting. 3/15/85-Revised technical staff position due.	AD position due 4/15/85
Maine Yankee	Staff has requested that the licensee install redundant level indicators and low level alarms on demineralized water storage tank (DWST). Licensee maintains that the current system is adequate, since DWST is dedicated to the auxiliary feed-water system.	Y	9/28/84	Utility	11/8/84 AD meeting. 3/15/85 Revised technical staff position due	AD position due 4/15/85
Farley ⁴ Unit 2	Licensee has requested deletion of all turbine surveillance requirements in the Technical Specifications. NRC staff has agreed subject to certain stipulations; licensee disagreed with staffs proposal.	N	February 1983 approximately	Utility	3/23/83 AD meeting 8/16/83 DD meeting	Closed 1/27/84 Amendments to licensee issued on Technical Specification change.

Note: ⁴ This issue and appeal meetings at the Assistant Director and Division Director Levels preceded the interim procedures implemented by NRR on October 25, 1983.



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

JUN 20 1985

MEMORANDUM FOR: Sharon R. Connelly, Director
Office of Inspector and Auditor

FROM: William J. Dircks
Executive Director for Operations

SUBJECT: DRAFT OIA REPORT ON STAFF'S IMPLEMENTATION OF INTERIM
PROCEDURES FOR MANAGING PLANT-SPECIFIC BACKFITTING

Reference: Memorandum, Sharon R. Connelly to William J. Dircks,
May 23, 1985, with subject draft report attached.

Thank you for the opportunity to comment on this draft report. I am enclosing some specific comments regarding specific statements in the draft text. Your recommendations are addressed below.

RECOMMENDATIONS: (page 6 of Executive Summary)

1. We recommend that the EDO assure that the additional improvements to MC-0514 we identify on pages 14 and 15 of our report are included in the revision to MC-0514.

Pages 14, 15* of report; recommended the following additional improvements:

- a. Procedures are needed for resolving disagreements within the NRC staff. The interim procedures imply unanimity within the NRC staff as to whether a requirement is a backfit. We observed disagreements between staff members in different NRC offices over whether requirements were backfits that were never addressed in the context of the backfit procedures.

Response:

We do not believe that material should be included in MC-0514, an EDO policy document, to direct the management of conflict resolution, a management function that transcends all programmatic functions and responsibilities. The revised MC-0514 clearly directs which staff senior manager is responsible for each step of backfit decision making, including the first step, identification of backfit. The responsible manager will, when presented with conflicting views within the staff, take appropriate actions to resolve those views within a reasonable time prior to deciding whether or not to issue a proposed staff position as a backfit position.

*Page numbers refer to draft OIA report. See pages 7 and 8 of final report.

- b. Clearer guidance is needed to utilities specifying the form and content that appeal of a backfit should take. For example, we believe utilities bear some responsibility when they identify a backfit to describe what they believe is the issue involved and why they think it is a backfit.

Response:

We agree with this recommendation and will make appropriate revisions to MC-0514 to identify and briefly describe what the staff will expect in a utility appeal.

- c. We believe the procedures should require the staff to notify the utility when the staff is considering whether an issue is a backfit. Our concern in this regard is based largely on instances we observed where project managers in NRR believed requirements imposed by other NRC offices were backfits. (For example, see Appendix II). Resolution of those issues was never achieved under the interim procedures. The problem in such cases is that if the utility is not notified that the staff is considering such requirements as backfits, the utility may implement the requirement prematurely. The revised MC-0514 implemented in April 1985, now requires utilities to be "promptly informed in writing regarding the staff plans" when they appeal proposed backfits. However, it still does not require utilities to be informed of other staff backfit considerations which may affect them, but which they did not appeal.

Response:

If the staff is considering whether an issue is a backfit, then it has not yet imposed that position on a licensee - there should be no problem of premature licensee implementation caused by the NRC. With regard to the problem noted by OIA, if a staff unit does propose to impose a staff position, which that staff unit believes is not a backfit, and the utility does not claim that the position is a backfit, there would be no backfit consideration process to notice to the utility. We feel that the provision for licensee appeal of a staff imposed position on the basis that the licensee believes the position should be recognized as a backfit is adequate recourse. The definition of backfit is straight forward enough that if any portion of the staff has reason to suspect that a position should be treated as a backfit, then the licensee will, in most cases, arrive at a similar position before implementing the position.

If the utility appeals a staff position on the basis that it should be considered a backfit, such claim will be entered promptly in the Plant-Specific Backfit System prior to the resolution of the claim by

the staff, which is to be accomplished within 3 weeks. In addition, identification of the utility's claim document will also assure dissemination of the fact that a staff position is undergoing review.

Further, it is our judgment that licensees should not be involved in the NRC management process for resolving staff differences.

- d. The procedures should provide a mechanism whereby all offices are aware of backfit determinations made by other offices, to avoid duplicative and possibly conflicting backfit determinations on the same issue. For example, we reviewed one case in which one NRC office attempted to impose a requirement on a utility which another office has already considered and which the Commission has rejected.

Response:

All backfit determinations are to be entered in the Plant-Specific Backfit System (PSBS), a central data base which makes available, via computer terminals in NRR, NMSS, IE, and the five regional offices, all data on every backfit initiated by the staff or claimed by a licensee. All offices will have available substantive information (including references to pertinent documentation) on backfit determinations made by other offices. The PSBS is operable and representatives from each of the offices have received training in accessing and entering data in the system.

- e. The procedures need to be clarified as to whether plant licensing can proceed prior to final resolution of plant-specific backfits. The interim procedures provide that resolution of plant-specific backfits on operating reactors will not affect operation of the plants. For example, if a plant-specific backfit is identified during a plant's refueling outage, resolution of the backfit will not affect the plant's ability to go back into service. The revised procedures seem to contain the same provision in stating that "plant operations shall not be interrupted during the staff's evaluation and backfit transmittal process, or a subsequent appeal..."

However, even though the revised procedures also apply to plants in the operating license review process, it is unclear whether plant licensing can proceed without final resolution of plant-specific backfits.

Response:

Additional text will be included in the Manual Chapter to clarify that during resolution of plant-specific backfits on plants in construction, the NRC will not impose constraints on construction or licensing schedules. Also, a proposed final rule on backfitting, 10 CFR 50.109 is currently in preparation. We will propose language for the rule that addresses the need to assure that during the pendency of a backfit decision on a given issue, licensing actions will not be withheld.

RECOMMENDATION 2:

We recommend that the EDO provide guidance to Office Directors/Regional Administrators as to how issues which would be backfits under the current definition in 10 CFR 50.109 but which will not be backfits under the revised definition of backfits in revised MC-0514 are to be handled.

Response:

The revised MC-0514 is the guidance to Office Directors/Regional Administrators referred to in the recommendation. The April 12, 1985 directive signed by V. Stello, Jr., DEDROGR, clearly states that staff practice shall, as of May 1, 1985, be consistent with the policy expressed in MC-0514, and that detailed office procedures will be written and approved by EDO to implement that policy. MC-0514 clearly describes that the licensing milestone from which changes will be backfits is, for plants in the operating license review stage, 6-months prior to docketing for operating license review. This milestone is clearly established in the backfit definition in MC-0514 and is different from the current 50.109. We feel there is no ambiguity and no further need for clarification, as the staff has been directed to use MC-0514 and has been trained in its use.

RECOMMENDATION 3

We recommend that the Director, NRR, develop formal procedures for resolving, in a timely manner, technical disagreements between the NRR and utility staffs, especially as they relate to issues identified by utilities as backfits but determined by NRR not to be backfits.

Response:

The NRR Project Manager Handbook contains a discussion of how to go about resolving technical disagreements between utilities and the staff for both applicants and licensees (Reference Sections 2 and 3). NRR Office Letter 2 (Standard Review Plan) and NRR Office Letter 34 (Utility Commitments) provide additional guidance relating to the processing of technical disagreements between utilities and the staff. However, no formal NRR procedures are in place to implement the process described in the Project Manager Handbook. We intend to evaluate the newly implemented Backfit process over the next several

months, and determine if more detailed implementing procedures for handling technical disagreements are necessary. Such procedures will be developed if the evaluation shows that additional guidance is required.

RECOMMENDATION 4:

We recommend that the DEDROGR staff hold regional meetings with utilities to explain the revised plant-specific backfit procedures and receive their comments prior to finalizing MC-0514.

Response:

We agree with the recommendation. As described in SECY 85-142 dated April 19, 1985, from W. J. Dircks to the Commissioners, we plan to send a generic letter to all licensees advising them of the revised plant-specific backfit process and soliciting their response regarding implementation problems. The Chairman has placed a temporary hold on issuance of the generic letter. Following issuance of the generic letter (including a copy of MC-0514), we plan to have meetings with industry representatives as requested and mutually arranged, in order to explain the revised backfit procedures being used by the staff.

RECOMMENDATION 5

We recommend that the Director, NRR, establish procedures to keep all responsible staff within NRR fully informed on issues appealed as backfits.

Response:

The procedure for plant-specific backfitting resulting from licensing activities that the NRR staff has used since April 1984 includes the provisions that the Operating Reactors Assessment Branch provide a monthly status report to the Director, Division of Licensing as well as a table in NUREG-0748, "Operating Reactors Licensing Actions Summary." The new procedure developed by Division of Licensing staff to implement the revised draft NRC Manual Chapter 0514 also contains such guidance. In the past, these status reports were distributed to project managers in the Division of Licensing. Future reports will be distributed as well to the technical review organizations so that they can remain abreast of current backfitting activities.



William J. Dircks
Executive Director
for Operations

Enclosure:
Comment on Draft OIA
Report

COMMENTS ON DRAFT OIA REPORT

1. Executive Summary, p. 4, 3rd para.:

"...because there are no formal procedures..." - We believe that there are formal procedures within NRR for resolving technical disagreements.

2. Main Report, p. 2, 1st para.:

"...nor the staff practices were adequate." - This sentence implies that the Commission concluded that staff practice for the imposition of any and all backfits was inadequate. In mid-1983, however, the Commission already had established the CRGR process (November 1981) and had also acknowledged that control of generic backfits via the CRGR process was working well; the specific action taken was intended to better manage plant-specific backfitting.

3. Page 5, 3rd para:

The first sentence states that recent revisions to MC 0514 were in response to public comment and Commission meetings on managing backfits. The recent MC 0514 revisions were directly initiated by a memorandum from Chairman Palladino to Mr. Dircks dated December 7, 1984, and subsequent discussions between Mr. Dircks and Chairman Palladino held during December 1984. During the development of the revisions in January and February 1985, responses to public comments (on the MC 0514 draft issued in April 1984) and Commissioner's opinions, as expressed in 1984 meetings, were taken into account.

4. Page 12, last para:

The first sentence implies that implementation of the revised draft MC 0514 will have an "interim" status pending Commission approval of a final backfit rule 10 CFR 50.109 and staff completion of regional and headquarters seminars. It should be clarified that, as stated in the April 12, 1985 memorandum from V. Stello to Office Directors and Regional Administrators, the interim guidance will then be converted into a formal NRC Manual Chapter. However, it is also important to note that the Manual Chapter and the office and regional implementing procedures will be living documents that will be revised as necessary to reflect lessons learned during implementation.