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OFFICE OF THE INSPECTOR GENERAL

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US NUCLEAR

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REGULATORY COMMISSION

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REVIEW OF NRC'S  
PROCESS FOR REGULATING PARTS  
USED IN NUCLEAR POWER PLANTS

OIG/93A-25 July 28, 1994

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# AUDIT REPORT

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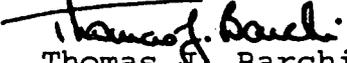
UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D.C. 20555

July 28, 1994

OFFICE OF THE  
INSPECTOR GENERAL

MEMORANDUM FOR: James M. Taylor  
Executive Director for Operations

FROM:

  
Thomas J. Barchi  
Assistant Inspector General for Audits

SUBJECT: REVIEW OF NRC'S PROCESS FOR REGULATING PARTS  
USED IN NUCLEAR POWER PLANTS

Attached is the Office of the Inspector General's audit report entitled, "NRC's Process for Regulating Parts Used in Nuclear Power Plants." The report makes two recommendations.

In his response to our draft report, the Deputy Executive Director for Nuclear Reactor Regulation, Regional Operations and Research generally agreed with our recommendations and did not provide any additional comments which warranted our review.

Attachment:  
As stated

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## REPORT SYNOPSIS

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The Office of the Inspector General has reviewed the Nuclear Regulatory Commission's (NRC) process for regulating parts used in nuclear power plants. Specifically, we examined NRC's justification for changing inspections of utilities' commercial grade dedication programs from a programmatic to a reactive type performance-based inspection.

During the 1980s, NRC's Office of Investigations (OI) worked with other government agencies on problems related to counterfeit and substandard parts. These problems presented concerns for the NRC with respect to the potential use of such parts in the nuclear industry. When NRC became aware of the government's identification of counterfeit and substandard parts that could be used in the nuclear industry, NRC began issuing generic communications to notify the industry about the existence of such parts.

From 1986 to 1989, NRC inspections disclosed widespread concerns with utilities' programs for approving commercial grade items for use in nuclear plant safety systems. Based on NRC's concerns and the potential for the existence of substandard and counterfeit parts, the industry developed a program to improve the process for approving commercial grade parts. In 1990 and 1991, NRC conducted assessments and pilot inspections to evaluate the industry's improvement program. In November 1993, NRC decided to change its inspection program from programmatic evaluation of utility activities to a reactive type of performance-based inspection. Performance-based inspection is NRC's effort to increase the emphasis on actual observation of ongoing facility activities and to reduce the emphasis on compliance review as the primary resource for NRC inspections.

Our review disclosed that NRC records do not support NRC's decision to change commercial grade item inspections from a programmatic to a reactive type performance-based inspection only. The inspections and assessments conducted in the early 1990s appear to present results with safety implications similar to the inspections conducted in the late 1980s. Although the NRC staff presented explanations for their decision, there is no documented analysis to (1) address the issues leading to the decision to go reactive, and (2) explain the factors that mitigate the apparent safety implications of the assessment and pilot inspection findings.

Our review also disclosed that NRC has not informed Congress of the change in its commitment to perform programmatic inspections of utilities' program for

approving commercial grade parts used in safety-systems. NRC committed to this action in response to a General Accounting Office (GAO) report on the existence of substandard parts.

Our report makes recommendations to support and document NRC's decision to perform commercial grade dedication inspections on a reactive basis only, and to inform Congress and GAO of this change in inspection policy.

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## INTRODUCTION

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The Office of the Inspector General (OIG) has reviewed the U. S. Nuclear Regulatory Commission's (NRC) process for regulating parts used in nuclear power plants. Specifically, we examined NRC's process for regulating and inspecting utilities' programs for approving commercial grade parts used in nuclear power plants. Utilities approve such parts using so-called "*dedication programs*."<sup>1</sup> Dedication activities are conducted pursuant to 10 CFR, Part 21, *Reporting of Defects and Noncompliance*.

This review was prompted by an allegation from *We The People* that NRC did not adequately respond to instances involving the alleged use of substandard parts and concerns about utilities' programs for dedicating commercial grade parts for safety-related use. This audit report addresses NRC and industry actions taken to develop and improve commercial grade dedication programs.

## BACKGROUND

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During the 1980s, NRC's Office of Investigations (OI) worked with other government agencies on problems related to counterfeit and substandard parts. These problems presented concerns for the NRC with respect to the potential use of such parts in the nuclear industry. When NRC became aware that the government had identified parts that could be used in the nuclear industry, NRC began issuing generic communications to notify the industry about the existence of such parts.

In 1986, NRC began inspecting dedication programs. These inspections raised questions about the effectiveness of the utilities' programs to assure the quality of commercial grade parts intended for safety-related use. The industry responded to NRC's concerns by developing an improvement program for commercial grade dedication activities. This program included developing utility guidance documents that contained examples of the proper procedures for dedication programs. NRC also responded to this issue by issuing two generic letters that (1)

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<sup>1</sup> Dedication is the process by which utilities certify that commercial grade parts are suitable for use in nuclear power plant safety systems.

established what NRC considered to be acceptable dedication practices, and (2) conditionally endorsed the industry established guidance.

The Office of Nuclear Reactor Regulation (NRR) has responsibility for developing inspection policy and procedures for commercial nuclear reactors. NRR's Vendor Inspection Branch (VIB) conducts inspections of (1) vendors and licensee contractors who supply safety-related products and services to the nuclear industry, and (2) licensees' procurement programs.

NRR recently transferred inspection responsibility for utilities' commercial grade dedication programs to the regions. The regions assumed inspection responsibility pursuant to revised Inspection Procedure 38703, *Commercial Grade Dedication*, dated November 8, 1993. That revision discontinued routine programmatic inspections and changed the basis for such inspections from a proactive to a reactive mode. The revised procedure calls for programmatic inspection of a dedication program when NRC determines that a dedicated part failed in service. NRC may also examine a utility's dedication process if it receives an allegation about a substandard part that has been dedicated.

Because of OI's involvement with counterfeit and substandard parts issues, we contacted the Director, Office of Investigations (OI) and his staff. The Director advised us that concerns with substandard parts began to arise in the early 1980s. However, NRC was skeptical about the existence of such parts in the nuclear industry and did not aggressively determine whether a problem existed. One OI official stated that early investigations of two parts cases were discouraged. In one case involving Ray Miller, Inc., the former Office of Inspection and Enforcement elected not to pursue a potential case, and in the other, Haywood-Tyler Pump, an investigation was initiated but the Regional Administrator directed that it be terminated. This case subsequently resulted in a congressional hearing.

OI officials explained that as a result of a government-wide task force during the mid-to-late 1980s, NRC recognized that counterfeit and substandard parts presented concerns for the nuclear industry. At that point, the agency began to act aggressively and address the problem. OI officials advised that NRC actions included giving OI wide latitude to investigate substandard parts cases and issuing generic communications to alert the industry about specific problems.

The Director stated that the problem with counterfeit and substandard parts has subsided. He stated that the percentage of OI cases involving these parts has declined from about one-third of OI's total caseload in the late 1980s, to about 10 percent today.<sup>2</sup>

Appendix I contains a detailed description of our objectives, scope, and methodology.

## **FINDINGS**

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Our review disclosed that the NRC documents, including the assessments and pilot inspections reports completed in 1991 and 1992, do not support NRC's decision to change commercial grade item inspections to a reactive type of performance-based inspection.<sup>3</sup> While the staff explained that several factors led to the decision, these factors are not documented. In regard to one factor, safety-significance, staff explanations appear to contradict the assessment and pilot inspection results.

Our review also found that in its response to a GAO report critical of NRC actions in the area of commercial grade dedication inspections, NRC did not follow through on its commitment to the Congress to continue programmatic dedication inspections after a deferral of about one and one-half years. Routine inspections have been discontinued and now inspections will be conducted only for cause. To date, NRC has not advised Congress or the GAO of this change in commitment or its basis for the change.

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<sup>2</sup> Our review of OI's annual reports from 1989 through 1992 indicated that OI closed an average of 15 substandard parts cases per year.

<sup>3</sup> Reactive type performance-based inspection will hereafter be referred to as performance-based inspection.

## **THE BASIS FOR THE DECISION TO INSPECT REACTIVELY IS NOT DOCUMENTED**

We found that NRC has not documented and supported its decision to change commercial grade item inspections from routine programmatic to performance-based. As a Federal agency, NRC is accountable to the Congress and the public, and therefore should document decisions affecting public health and safety. Our review disclosed what appears to be conflicting conclusions about the safety implications of the assessments and pilot inspections findings, and questions about the overall adequacy of utilities' dedication programs. Specifically, the findings from the assessments and pilot inspections findings of 1991 - 1992 appear similar to the findings from the 1986 - 1989 round of inspections, which were characterized as having "significant safety implications." However, NRC staff advised us the assessments and pilot inspections findings were not safety-significant and that this and other factors were the primary reasons for changing the basis for dedication inspections. Other factors included a move toward performance-based inspection and focusing inspection effort on safety-significant problems, NRC perceptions about industry improvements in dedication processes, overall industry performance improvement, and NRC resource reductions.

### *An Overview Of Commercial Grade Dedication*

Utilities may purchase parts intended for use in nuclear plant safety systems from approved 10 CFR Part 50, Appendix B suppliers or from so-called commercial grade suppliers. Utilities purchase parts from Appendix B<sup>4</sup> suppliers with the confidence that such parts meet the appropriate quality standards and can fulfill their intended safety function. Appendix B suppliers have an NRC approved quality assurance program in place.

Utilities may also purchase parts from commercial grade suppliers. When these parts are to be used in safety systems, a utility must "dedicate" the part. Dedication involves determining that commercial grade parts are suitable for use in nuclear power plant safety systems. Dedication programs are intended to assure the quality of the parts and to help minimize the potential use of substandard parts.

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<sup>4</sup> Appendix B to Part 50, *Quality Assurance Criteria for Nuclear Power Plants and Fuel Reprocessing Plants*.

Over the past several years, the number of Appendix B suppliers has been decreasing. According to the NRC staff, this has occurred because vendors have found it difficult to maintain and document a detailed quality assurance program. As nuclear plants get older and greater numbers of parts must be replaced, utilities must increasingly rely on commercial grade suppliers for parts. They must then dedicate these parts for use in their safety systems.

From 1986 to 1989, NRC initiated a series of dedication program inspections, inspecting the procurement and commercial grade dedication programs of 13 utilities. These inspections resulted in overall negative findings about utilities' dedication programs. After NRC inspections surfaced concerns about the adequacy of dedication programs, the Electrical Power Research Institute (EPRI) issued its guideline NP-5652 on commercial grade dedication in 1988. In 1989, NRC issued Generic Letter 89-02<sup>5</sup>, to address concerns with "counterfeit and fraudulently marketed products." In that document, NRC conditionally endorsed the EPRI guidelines that describe the effective components of a commercial grade dedication program.

In 1990, the Nuclear Management and Resources Council (NUMARC)<sup>6</sup> issued a comprehensive procurement initiative to address concerns with "substandard and fraudulently represented items," and increased obsolescence of installed parts. In its initiative, NUMARC said, "A significant step toward minimizing the potential for fraudulent or substandard products is the improvement in utility practices for dedication of commercial grade parts for nuclear safety related use." Utilities were to implement this initiative by July 1, 1992.

NRC suspended commercial grade inspection activities in 1990 to give the industry time to implement the NUMARC initiative.<sup>7</sup> The suspension began in March 1990 and ended in December 1991. During the inspection pause, NRC performed assessments of eight utilities' commercial grade dedication programs to evaluate

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<sup>5</sup> Generic Letter 89-02, "Actions To Improve the Detection of Counterfeit and Fraudulently Marketed Products."

<sup>6</sup>NUMARC has changed its name to the Nuclear Energy Institute (NEI).

<sup>7</sup> As noted earlier, the GAO was critical of this action and stated that NRC was reducing its regulatory influence over the nuclear industry.

progress in implementing improvements. NRC called the dedication reviews "assessments" because there was no enforcement action associated with them. After completing the assessments, NRC began a round of five pilot inspections to further assess the industry's progress in implementing the NUMARC initiative. NRC completed these inspections in June 1992.

In March 1993, NRC announced a public workshop to discuss key commercial grade dedication issues. NRC also solicited public comments on a draft inspection procedure for commercial grade dedication programs. In April 1993, NRC held the workshop and presented the draft inspection procedure.<sup>8</sup> In July 1993, NRC revised the draft procedure to a more results oriented or performance-based inspection approach and to incorporate comments received at the workshop. The revised procedure indicated that future dedication inspections would be conducted using a performance-based approach. In other words, if an event is the result of a dedicated part or component failure, the item would be investigated to determine if it was dedicated properly. If the utility improperly dedicated the item, its dedication program would then be examined. NRC issued the final revised procedure, to be implemented by the regions reactively in November 1993.

#### *Prior Assessments Results Appear To Have Safety Implications*

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From 1986 to 1989, NRC conducted 13 inspections of utilities procurement and commercial grade dedication programs. As stated in Generic Letter 91-05<sup>9</sup> the results of these inspections identified a common problem: the failure of the licensee to assure that a commercially procured and dedicated item was suitable for the intended safety-related application. GL 91-05 characterized the inspection findings as having "significant safety implications."

During the 1990 - 1991 inspection pause, NRC initiated a series of eight assessments to evaluate industry progress in implementing NUMARC's comprehensive procurement initiative. Seven of the eight assessments noted that

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<sup>8</sup> NRC received written comments from 17 utilities, 3 consultants, 2 major nuclear suppliers, and 1 individual. Based on the comments, changes to the draft inspection procedure were made that NRC considered appropriate. Comments generally favored adoption of the revised inspection approach.

<sup>9</sup> Generic Letter 91-05, "Licensee Commercial-Grade Procurement and Dedication Programs."

the utilities had made a significant effort to strengthen their commercial grade dedication programs. However, many weaknesses were also disclosed. One common concern was the failure to address issues related to the critical characteristics<sup>10</sup> of a dedicated item. Concerns related to critical characteristics were also identified as significant problems in the 13 inspections conducted from 1986 to 1989. The eighth assessment stated that the utility had not made a significant effort to improve its program and that "the overall program description did not appear consistent with the dedication philosophy described in the Electric Power Research Institute (EPRI) Report NP-5652."

The eight assessments noted specific weaknesses for each plant reviewed. One assessment stated that the utility's program was in an early stage of implementation and improvements were needed in several areas. One of the most significant weaknesses noted was a lack of detailed procedures to verify critical characteristics. Another assessment observed implementation weaknesses, including improper identification of appropriate design criteria, and safety functions, and methods for verifying the critical characteristics as part of the dedication process. A third assessment noted that the utility's program did not require the verification of characteristics necessary to demonstrate that the item is suitable to perform its safety function. A fourth assessment stated that weaknesses in receipt inspection for commercial grade items were significant. A fifth assessment criticized a utility for relying on vendor information without validating that information. A sixth assessment admonished a utility for failing to fully implement its program, and a seventh stated that the utility's program did not address restrictions on dedication methods.

In the cover letters to each utility for seven of the eight assessments, NRC noted that with appropriate modifications, the utilities' programs, if properly implemented should/could provide adequate control over the commercial grade dedication process. For the remaining utility, the cover letter was silent on the effects of anticipated improvements. However, at the time the revised inspection procedure became effective, there had been no follow-up inspections to determine if the weaknesses identified in the eight assessments were addressed.

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<sup>10</sup> EPRI NP-5652 defines critical characteristics as identifiable and measurable attributes/variables of a commercial grade item, which once selected to be verified, provide reasonable assurance that the item received is the item specified.

*Pilot Inspection Results Appear To Have Safety Implications*

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After completing the assessments in 1991, NRR conducted five pilot inspections of utilities' procurement programs, including two that were inspected during the 1986 - 1989 round of inspections. NRC's intention was to select utilities with known problems in the procurement area, and some that were believed to have effective programs. The last inspection was completed in June 1992.

The inspection results from three of the five inspections stated that the individual utility failed to properly dedicate certain commercial grade items (CGI) procured for use in plant safety-related applications, and that CGIs of indeterminate quality were installed or accepted for installation in plant safety systems. In particular, the results of one inspection stated that "numerous" CGIs fell into this category.

The pilot inspections noted specific weaknesses for each plant reviewed. Some of the weaknesses addressed included one plant's failure to identify safety functions of the CGIs and failure to identify and verify the critical characteristics of CGIs. Another inspection found that the plant failed to adequately identify safety functions of parent or subcomponents and failing to verify critical characteristics. At a third plant, the inspection criticized the plant for failing to identify safety functions and critical characteristics of CGIs. That inspection also noted that "in view of the large number of items of indeterminate quality which were identified during this inspection, you should make a prompt assessment of the potential safety implications of these deficiencies and take appropriate corrective actions based on your review of the information contained in this report."

The overall finding from three of the five pilot inspections concerning CGIs of indeterminate quality, is similar to the common problem identified in the 1986 - 1989 inspections. That problem was identified as the licensees' failure to assure that a commercially procured and dedicated item was suitable for the intended safety-related application. At the time the revised procedure was issued, there had been no follow-up inspections to determine if the utilities' addressed the deficiencies noted in the pilot inspections.

*Factors Effecting The Inspection Change To Performance-Based Inspection*

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As previously mentioned, NRR managers advised that several factors have led to the recent decision to change from routine programmatic to performance-based inspection. According to the staff, these factors included (1) a desire to focus inspection effort on safety-significant problems, an objective of performance-based inspection,<sup>11</sup> (2) NRC's belief that NUMARC's comprehensive procurement initiative had resulted in better industry performance, as evidenced by the results of the assessments and pilot inspections, (3) NRC resource reductions, and (4) general improvements in industry performance.

We talked with NRR managers about what appears to be an inconsistency between NRC's decision to adopt a performance-based approach to overseeing utilities' dedication processes and the findings of its prior assessments and inspections. They told us that the findings were not safety-significant, although they may appear to have been so. One senior manager explained that many items examined were chosen by NRC without considering how that item would impact plant safety. He advised that the pilot inspections selected dedicated items from a utility's "Q-list," which is intended to list a plant's safety-related parts. The number of items on a Q-list varies from plant to plant, but each plant normally has thousands of items on its list. Over time, utilities have increasingly placed items on their Q-lists in part because it could simplify procurement practices. For example, a part could have several uses in a plant and might be used for a safety-related or non-safety-related application. Instead of setting various procurement requirements for different uses of the same part, a utility might have decided to purchase the part using the highest criteria level (safety-related), although a part might not be used for that purpose. As a result, parts could be on a Q-list even though they were not being used in a safety-related application.

This manager also advised that not all items on a Q-list have the same level of safety-significance. In recognition of this concern, he said that NRC is moving toward a graded approach to quality assurance. A graded approach will focus NRC and industry attention on those items that meet a defined threshold for safety-significance. These items will be subject to the full measure of NRC's

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<sup>11</sup> Performance-based inspection is NRC's effort to increase the emphasis on actual observation of ongoing facility activities and to reduce the emphasis on document review as the primary resource for NRC inspections.

quality assurance requirements. Those items that do not meet the defined threshold will be subject to less stringent requirements.

Regional staff that assisted the VIB with one pilot inspection also believe that the findings from that inspection were not safety significant. They echoed the statements of NRR managers about the selection of items for review and expressed concerns over the safety status of items listed on utilities' Q-lists.

NRC and industry are currently taking action to better classify systems and components listed on utilities' Q-lists. This action is an attempt by NRC and the industry to initiate a performance-based and graded approach to implementing quality assurance. NEI is coordinating industry activity, which is being undertaken to facilitate implementation of a recent NRC rule (Maintenance Rule).

Safety-significant systems and components designated under the maintenance rule will also be considered as safety-significant for commercial grade dedication purposes. Industry plans to implement a pilot project in mid-1994 using the graded approach at selected utilities, and hopes to issue an industry guidance document on graded quality assurance in January 1995.

NRR managers also advised that industry progress in developing commercial grade dedication programs affected the decision to inspect using a performance-based approach. They said that despite some identified weaknesses, the assessments and the pilot inspections demonstrated overall general improvements in commercial grade dedication programs. One senior manager said that this conclusion about improvements was based on (1) the results of the assessments and pilot inspections, which represent an approximately 10 percent sample of nuclear plants, and (2) industry feedback received in the subsequent workshop conducted with the industry.

Two other factors that affected the decision were industry performance improvements overall, and a 12 percent reduction in NRR program resources from 1994 to 1999. We were told that this reduction would be absorbed primarily by the inspection program. Furthermore, NRC has committed to reducing the number of team inspections, which are resource intensive for both NRC and the utilities. A commercial grade dedication inspection normally requires the efforts of four to five NRC staff for about five days.

Senior NRR managers believe that industry performance improvements in general, and commercial grade dedication improvements in particular, together with a lack of safety-significance of previous findings and forthcoming resource reductions, form an acceptable basis for changing commercial grade dedication inspections to a reactive basis.

The Director, NRR, acknowledged that NRR has not prepared documents to explain the rationale for the change in inspection policy. He advised that the final decision has not been documented to reconcile what seem to be continuing dedication program deficiencies and the decision to inspect reactively. He indicated that it would be useful to prepare a document containing the analysis for the record, and for Commission information.

#### **NRC HAS CHANGED ITS COMMITMENT TO CONGRESS AND GAO WITHOUT NOTIFICATION**

Our review disclosed that while NRC told Congress that it would resume programmatic inspections of dedication programs (after a suspension of such activity), NRC has not notified Congress of the change to this commitment. Specifically, NRC's response to a GAO report critical of NRC's decision to suspend dedication inspections told Congressional oversight committees that it expected to resume programmatic inspection activity. To date, NRC has not informed Congress of its new policy to discontinue routine inspections of commercial grade dedication programs.

In a 1990 GAO report addressing governmentwide concerns about substandard parts,<sup>12</sup> GAO discussed concerns affecting several agencies including NRC, the National Aeronautics and Space Administration, the Department of Defense, and the Department of Transportation. Regarding NRC activities, GAO noted nuclear power plants throughout the United States had received or were suspected of receiving substandard parts and that NRC had taken actions to detect and minimize the occurrence of substandard parts. GAO also noted that while NRC had not identified major safety problems resulting from substandard parts, NRC

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<sup>12</sup> Counterfeit and Substandard Products Are a Governmentwide Concern, GAO/RCED-91-6, October, 1990.

acknowledged that, unchecked, the problem could have a significant impact on nuclear plant safety.

GAO's report noted the importance of effective dedication programs and said that recent NRC inspections had found weaknesses in 12 of 13 utilities' procurement and dedication programs reviewed. GAO noted that in 1990, (1) NRC suspended its inspection activity to give utilities time to implement an industry improvement program for commercial grade dedication, and (2) withdrew enforcement action against several utilities because the NRC staff concluded that problems with dedication programs may have been generic and industrywide. GAO was critical of this action and stated "Although utilities are buying an increasing number of commercial grade products for nuclear power plants and concern exists about the reliability of these products, NRC is reducing its regulatory influence over the nuclear industry." GAO recommended that NRC reinstitute inspections of utilities quality assurance programs and take appropriate enforcement action when violations occur.

NRC's Chairman responded to the GAO report in a January 25, 1991 letter to Congressional oversight committees. In NRC's response, the Chairman reiterated the agency's decision to "defer programmatic inspections" temporarily to allow the nuclear industry time to implement its improvement efforts. He advised that in the interim, NRC would conduct assessments to monitor the industry's progress, and stated that "if the industry's efforts prove inadequate, the NRC will vigorously pursue enforcement actions." He also stated that NRC expected to continue programmatic inspections of commercial grade dedication programs after the deferral period ended. On October 25, 1991, NRC's Executive Director for Operations notified the oversight committees that it had resumed inspection activity. Although NRC reinitiated inspection activity in the form of *pilot inspections*, routine, programmatic inspections have since been discontinued.

## CONCLUSIONS

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In 1993, the staff decided to switch to a performance-based approach for inspecting utilities programs for approving commercial grade parts used in nuclear power plant safety systems. The staff explained several factors affected this decision including planned reductions in NRC resources and overall improvements

in industry performance. The use of these factors and the justification for the change is not documented.

Between 1986 and 1989 NRC conducted a series of 13 inspections of utility dedication programs. The inspections revealed disturbing findings with safety significance. NRC then suspended inspections to allow the industry time to strengthen its programs. While the industry was implementing improvements, NRC began a series of assessments to evaluate industry progress. When the industry was to have completed their reforms, NRC initiated a series of pilot inspections.

Although we found that assessments and pilot inspections findings appear to have safety implications similar to the 1986 - 1989 inspections, NRC managers and staff advised that the findings were not safety significant. This seeming contradiction is also not addressed as a justification for the change in inspection policy. We believe that NRC must reconcile and document the seriousness of the situation in the late 1980s with the assessments and pilot inspections results, and the decision to now inspect using only a performance-based reactive approach.

We continue to have concerns about the effectiveness of NRC's program for inspecting dedication programs. The recent adoption of a performance-based and graded approach to evaluating the adequacy and safety-significance of safety-related parts would make a final conclusion premature at this time. We will, therefore, continue to monitor the progress of this program and, if necessary, conduct a future review.

Moreover, NRC advised Congress in 1991 that it would continue programmatic inspection activity of dedication programs, but it has not informed Congress of its change in policy. Since this policy recommends programmatic inspection only after a problem is identified, we believe that NRC should inform Congress and GAO of this change in its commitment.

## **RECOMMENDATIONS**

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Because commercial grade dedication programs are intended to assure the quality of parts dedicated for use in safety systems, and provide a front line of defense against substandard parts, we recommend that the Director, NRR:

1. Reconcile and document early 1990's assessment/inspection findings with decision to limit commercial grade dedication inspection to a performance-based approach.
2. Advise the appropriate congressional contacts of the change in NRC's inspection philosophy.

## **AGENCY COMMENTS**

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On July 26, 1994, the Deputy Executive Director for Nuclear Reactor Regulation, Research and Regional Operations responded to our draft report. He agreed with our recommendations to document the rationale for and inform the Commission of NRC's current approach for procurement inspections. In addition, he agreed to advise the appropriate congressional contacts of the change in NRC's inspection policy.

## **OBJECTIVES, SCOPE, AND METHODOLOGY**

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We initiated our review to assess NRC's basis for changing inspections of utilities' commercial grade dedication programs from a proactive to a reactive basis. Our objective was to determine how NRC justified the change from programmatic to a reactive type, performance-based inspection.

We conducted our review from July 1993 through January 1994. We interviewed NRC headquarters and regional officials as well as officials of the Nuclear Management and Resources Council (NUMARC).

We reviewed NRC rules and regulations and guidance affecting the regulation of safety-related parts. We also reviewed NRC assessments and pilot inspections of utilities commercial grade dedication programs and industry documents related to the commercial grade dedication process. Further, we attended a public meeting between NRC and NUMARC to discuss a graded approach to implementing quality assurance requirements.

Because this review examined a change in inspection policy, we did not evaluate the internal controls related to NRC's oversight of utilities commercial grade dedication programs.

We conducted our review in accordance with generally accepted Government auditing standards.

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