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

CHAIRMAN

May 27, 1988

The Honorable John B. Breaux, Chairman
Subcommittee on Nuclear Regulation
Committee on Environment and Public Works
United States Senate
Washington, D. C. 20510

Dear Mr. Cha[illegible]:

I am enclosing the Commission's responses to the questions posed by Senator Mikulski as forwarded by your letter of April 15, 1988. It is our understanding that the responses to these questions will also be made a part of the record of the Committee's March 2, 1988 hearing on NRC's Fiscal Year 1989 budget request.

Since[illegible],

Lando W. Zech Jr.
Lando W. Zech, Jr.

Enclosure:
As stated

cc: Senator Alan Simpson

QUESTION 1A. What criteria will be applied by the NRC for measuring the changes that need to be taken before the Peach Bottom nuclear plant can be restarted?

ANSWER.

When a facility such as Peach Bottom Atomic Power Station (PBAPS) is shut down for safety reasons, the NRC determines specific corrective actions that must be satisfactorily implemented before the plant can be permitted to restart. In the case of Peach Bottom, substantial changes are needed in personnel, organizational interactions, and procedural implementation at all levels of the Philadelphia Electric Company (PECo) organization. PECo's "Plan for Restart" is the blueprint for the needed changes. Once accepted by the NRC as a satisfactory plan of action to bring about the needed changes at Peach Bottom, fulfillment of the requirements of this plan become the essential "restart criteria". The NRC uses the utility recovery plan as a basis when evaluating restart readiness. The NRC staff determines the effectiveness of the recovery plan's implementation and whether it is having the desired effect in correcting the problems that have been identified at Peach Bottom.

PECo has submitted its plans to NRC for review. Their recently revised "Plan for Restart of Peach Bottom Atomic Power Station" is currently under review by the staff. The staff's review, which is based on the NRC's rules, regulations, standards, license conditions, and licensee commitments, will ensure that the PECo plan meets the requirements of the NRC Order that shut down PBAPS. NRC is closely monitoring PECo actions to implement its plan and to prepare PBAPS for return to service.

In its review of the PECo plan, the staff is considering NRC concerns which resulted in the Order, concerns subsequently identified by NRC and the Institute for Nuclear Power Operations, and other concerns raised by government officials and members of the public. The staff is giving particular attention to the following aspects:

1. Proposed Corrective Actions

   The root cause of problems and events leading to the shutdown must be properly identified and comprehensive corrective actions determined. The plan must provide for implementation and verification of corrective actions.

2. Licensee Management Organization

   PECo's management organization must provide the necessary resources and an appropriate climate to nurture the safety culture that must exist at an operating nuclear power plant. The station and corporate organizations must demonstrate that they can effectively communicate, coordinate, integrate, and prioritize safety objectives such that they are achieved in a manner commensurate with that necessary for safe operation.

   PECo must further demonstrate that it has an appropriate appreciation of issues of safety significance and a positive attitude toward resolving such issues. This requires sufficient numbers of qualified and experienced personnel be provided for all key positions, including management and licensed operators. The organization must demonstrate its ability to work as a team, to provide strong engineering support for plant activities, to identify and correct safety problems and to verify implementation and effectiveness of corrective actions, and must possess an active and effective self-assessment capability.

3. Operations Staff

The individuals licensed by NRC to operate PBAPS must fully recognize and diligently carry out the responsibilities bestowed upon them by this agency in their individual licenses. Each individual must display a positive attitude toward safety in all aspects of plant operations, including attentiveness to duty and fitness for duty.

4. Plant Readiness

The licensee must demonstrate that all safety equipment meets NRC requirements for operability, including surveillance test requirements, prior to restart. All outstanding safety-related maintenance work should be complete and the backlog of other maintenance work reduced to a level commensurate with a high state of operation readiness. Consideration will also be given to PECo's ability to maintain their maintenance backlog at a level consistent with sustained safe operation.'

QUESTION 1B. How will the NRC determine and apply these criteria?

ANSWER.

As discussed in the response to Question 1A, the NRC approved "Plan for Restart" will form the basis for these criteria. The criteria will be applied by evaluating the implementation of PECo's "Plan for Restart", when it is ultimately accepted by the NRC. Not only must all elements of the plan be implemented by PECo, but the implementation must be done in an effective manner which gives a high degree of assurance that past problems are corrected and that they will not recur. In this regard, the NRC will rely on its extensive past experience in evaluating technical, managerial, and operational programs at nuclear facilities.

For example, since plant management and leadership skills were of concern, the staff will be reviewing the qualifications of and training provided to plant management personnel. The effectiveness of the human relations training provided to operations personnel is being assessed both by reviews of the program content and by conferences with operations personnel to determine its expected effect on future levels of performance. The revised corporate management structure, membership, and self-assessment capabilities are being reviewed to assess the expected ability to recognize and act upon future problems. NRC team inspections will assess the physical readiness of the plant by conducting maintenance program inspections and operational readiness inspections.

QUESTION 1C. What will the involvement of the public be in the restart decision?

ANSWER.

Numerous meetings have been held with the licensee, state and local governmental groups, and with the public since the shutdown of the PBAPS. The Commonwealth of Pennsylvania and the State of Maryland have been given an opportunity to comment on the "Restart Plan", which, as discussed in Question 1A, defines the restart criteria. Similarly, comments have been solicited at the series of public meetings that have been held in Pennsylvania and Maryland. Thus, by being afforded an opportunity to comment on the restart criteria, the public has been able to participate in the restart evaluation.

QUESTION 2. In November of last year, PECo submitted their original plan for the restart of Peach Bottom. On January 11 of this year, the Institute of Nuclear Power Operations (INPO) issued a report that was highly critical of the PECo plan, stating that it was "insufficient to bring about the necessary change." What actions have been taken by PECo since that time and have these actions been deemed adequate to address and correct the problems that have been identified by either the NRC or INPO?

ANSWER.

It must be recognized that there have been several versions of the PECo "Plan for Restart". None of these has been accepted by the NRC as being wholly satisfactory and responsive to the Order. The INPO report was highly critical of an interim version of the "Plan for Restart" and INPO's conclusions and recommendations were similar to concerns raised by the NRC during its review of the several versions of the "Plan for Restart". As the process has unfolded, both NRC and INPO have submitted their concerns to PECo for resolution.

The initial corrective action plan was submitted by the licensee in August 1987 and was followed by a staff position in October 1987 that stated that the Plan failed to address a fundamental staff concern. In November 1987, the licensee submitted Section I of its revised corrective action "Plan for Restart" in response to the issue raised by the staff. In February 1988, the licensee completed the plan with the submittal of Section II, which addressed actions specific to the onsite organization and the plant.

The licensee's actions in response to the INPO report were discussed in their letter of April 8, 1988, which submitted Revision 1 of the "Plan for Restart." The licensee indicated that they had incorporated the second and third recommendations of the INPO letter into the revised plan. These recommendations dealt with minimizing actions that bypassed or undermined line management and with establishing accountability for the unsatisfactory situation that had developed over a period of years.

The licensee also stated in the April 8 letter that an independent consultant had been retained to respond to INPO's first recommendation that a detailed analysis of the licensee's internal investigation material should be developed.

By letter dated March 4, 1988, the staff requested that any information PECo provided to INPO in response to the issues in the INPO report also be provided to NRC and that the NRC be apprised of the results of INPO evaluations prior to restart.

The staff is continuing its review of the revised "Plan for Restart" and will review the information requested by its March 4, 1988, letter upon receipt from the licensee. The NRC will complete its evaluation when all appropriate information and plan revisions have been received from PECo.

QUESTION 3A. It is my understanding that there are numerous maintenance items outstanding at Peach Bottom. In fact, it is my understanding that there are over 1,500 items in need of maintenance activities of one sort or another. How many outstanding maintenance items does the NRC believe exist at the plant?

ANSWER.

As of April 21, 1988, the licensee's records indicate that there are approximately 11,200 open maintenance items at the Peach Bottom facility. These open items include corrective maintenance, preventive maintenance, facility enhancements, and the routine refurbishment of structures, systems, and components. Of these open items, about 3,200 are for work on safety-related equipment. Some of the open items (2,700 of the 11,200) have been completed except for testing which cannot be accomplished in the present plant condition (e.g., some components must be tested at elevated plant temperatures or in system configurations not permitted in the present shutdown condition). It should be noted that these numbers are changing daily based on work activities that are ongoing at the facility.

QUESTION 3B. Please explain why there are so many outstanding maintenance items?

ANSWER.

During periods of operation, any plant accumulates a backlog of outstanding maintenance items that can or must be deferred until an outage. When a plant shuts down for a major outage, additional preventive maintenance items that must be completed during the outage are added to the backlog. Moreover, potential problems identified to the utility by the NRC or the industry that require maintenance actions to investigate and repair as necessary frequently add to the backlog. For example, a generic industry problem with a particular type of valve, of which there may be several hundred in the plant, could lead to several hundred maintenance items to inspect and repair or modify the identified condition. During an outage, maintenance activities would be scheduled to accomplish tasks on safety-related equipment as a high priority. Accordingly, some open maintenance items on non-safety-related equipment, which have no impact on the safety or reliability of plant operations, have a low priority and may be deferred until a subsequent outage. Therefore, these low priority items also contribute to the backlog. As indicated in the response to Question 3A, the maintenance backlog is also influenced by the inability to complete the testing of some components due to existing plant conditions. Although the numbers of outstanding maintenance items is large, the fact that 10,500 maintenance activities were completed during the last Peach Bottom SALP period from February 1986 to May 1987 may help to put the current number of 11,200 into perspective.

QUESTION 3C. Are the number of outstanding maintenance items at the Peach Bottom plant above average, average, or below average for the industry as a whole?

ANSWER.

There are always a number of outstanding maintenance items at any nuclear power plant, including preventive and corrective maintenance actions, facility enhancements and routine refurbishment of structures, systems, and components. However, since each utility has a different approach to identifying and tracking maintenance activities, comparing the numbers of outstanding maintenance items between individual plants is not always meaningful. For instance, the administrative controls at one utility may designate a separate open item for each maintenance activity, while another utility may consolidate several related maintenance activities into a single open item. Thus, the first utility may initiate several maintenance items for a specific activity, (i.e., correction of leaking valves) while the second utility may initiate a single maintenance item for the same activity. For the reasons stated above, it is difficult to compare Peach Bottom with the industry as a whole.

QUESTION 3D. Please provide a list of those outstanding maintenance items that the NRC believes have a significant safety related implication.

ANSWER.

A complete list of outstanding maintenance items was forwarded earlier at your request. The NRC believes the majority of the 3,200 safety related items identified on that list are significant. The licensee plans to complete all of these items before a request to restart each respective unit is made. As noted in the response to Question 3A, some of these items may continue to be outstanding because testing must be delayed until appropriate plant conditions are achieved.

QUESTION 3E. What type of improvements in the maintenance program at Peach Bottom will the NRC insist on before it allows the plant to reopen?

ANSWER.

As explained in the answer to Question 1A, the NRC staff's review of the PECo restart plan is giving particular attention to plant readiness, including equipment operability, maintenance backlog, and sufficiency of maintenance resources. The NRC will evaluate PECo's effectiveness in implementing the approved plan prior to any restart decision on Peach Bottom.

In addition, on March 23, 1988 the Commission issued its Policy Statement on Maintenance of Nuclear Power Plants. This policy statement identifies the activities that form the basis of an adequate maintenance program and provides guidance to the industry on improving maintenance programs. We will also review the Peach Bottom maintenance program in light of this policy statement. A team inspection will complete a programmatic review by evaluating maintenance and post-maintenance testing records, witnessing selected maintenance and post-maintenance testing activities, and inspecting the physical condition of equipment in the plant. A copy of the Commission Policy Statement on Maintenance of Nuclear Power Plants is enclosed for your information.

Enclosure:
As stated

QUESTION 4A. Employees at Peach Bottom have been indicted for possession and/or use of illegal substances while on the job. How does the NRC propose to correct the problem of drug abuse at Peach Bottom?

ANSWER.

PECo, not the NRC, must correct the problem of drug abuse at Peach Bottom. The NRC expects licensee management to aggressively address and resolve drug abuse problems at all nuclear power plants. In addition to implementation of industry wide programs, such as preemployment and for-cause drug testing, PECo has taken additional steps to correct the problem at Peach Bottom. These extra measures include annual drug testing, undercover investigations, searches of the plant by trained dogs, and a policy which encourages confidential reporting of drug involvement by concerned co-workers. NRC will continue to monitor activities at Peach Bottom to ensure that responsible actions are taken when management becomes aware of any case of drug involvement. A proposed rulemaking being developed by the NRC staff would further strengthen the ability of PECo and other utilities to identify and correct drug abuse problems by requiring random testing programs and by prescribing sanctions against those individuals possessing or using drugs while on the job at nuclear power plants.

QUESTION 4B. Is PECo's fitness-for-duty program adequate to detect drug abuse at Peach Bottom?

ANSWER.

As described in the answer to Question 4A, the fitness-for-duty program at Peach Bottom includes those basic elements that are expected to be implemented at all operating nuclear power plants, as well as additional measures which go beyond basic programs. The basic program includes such elements as worker training in drug awareness and company policy, supervisory training in behavioral observation, availability of an employee assistance program, and drug testing on a preemployment and for-cause basis. Based on the results of the program and an NRC inspection of the program, we conclude that Peach Bottom has implemented an adequate program to detect drug abuse. Nevertheless, in order to provide additional assurance that all nuclear power plant operations are free of the effects of drugs, the Commission is initiating rulemaking that would require random, unannounced drug testing as an additional measure to deter and detect abuse.

QUESTION 5A. What is the status of the NRC's current efforts to curtail drug abuse by personnel at nuclear power plants?

ANSWER.

In order to provide additional assurance that all nuclear power plant operations are free of the effects of drugs, the Commission is initiating rulemaking that would require random, unannounced drug testing as an additional measure to deter and detect abuse. The regulations will be issued as a proposed rulemaking for public comment within the next several months. Until such time as these new regulations are promulgated in final form, the Commission's 1986 Policy Statement on Fitness for Duty of Nuclear Power Plant Personnel remains in effect. In accordance with this policy, each nuclear utility has implemented a fitness-for-duty program in accordance with guidelines developed by the Edison Electric Institute.

QUESTION 5B. Does the NRC believe that its current policy is an adequate way to implement fitness-for-duty programs, including drug testing, at nuclear power plants?

ANSWER.

The Commission believes that fitness-for-duty programs established by the nuclear industry over the past several years have been successful and responsive to its Policy Statement. Under this policy, significant progress has been made in establishing an environment in which nuclear power plant operations are free of the adverse effects of drugs. However, the Commission has concluded that federal regulations are needed to ensure uniform standards and practices and to include random drug testing as an element of fitness-for-duty programs.

QUESTION 5C. What is the NRC's position on random testing?

ANSWER.

The Commission believes that random drug testing represents an important element of a comprehensive program needed to deter drug use and to detect drug users in the workplace. Random testing provides reasonable assurance that workers are not under the influence of drugs and are fit to perform their duties. A program that includes random testing to both deter and detect drug abuse is considered to be especially important at operating nuclear power plants, where the actions of individuals could potentially impact the public health and safety.

QUESTION 5D. How many nuclear power plants have random testing programs in place?

ANSWER.

The Commission understands that 22 of the 54 nuclear utilities utilize random chemical testing. This information is based upon a recent survey of drug testing programs conducted by the Institute of Nuclear Power Operations (INPO). Some utilities have attempted to initiate random testing, but have thus far been unsuccessful because of legal challenges.

QUESTION 5E. How many incidents, nationwide, of drug abuse at nuclear power plants is the NRC aware of? Is the problem getting worse or better over the past five years?

ANSWER.

The following number of drug abuse incidents (occurring both on site and off site) have been reported to NRC since 1984. Some of the reported incidents involved more than one individual:

YEAR	NUMBER OF REPORTS
1984	26
1985	30
1986	44
1987	115
1988	31 (though mid-April)

Formal NRC guidance to licensees on the reporting of drug abuse at operating nuclear power plants was issued in mid-1987. Prior to that time, there was no NRC guidance on reporting drug abuse incidents. Therefore, the incidents shown for the years 1984-1986 resulted from the voluntary reporting of some incidents, often informally through NRC resident inspectors.

The Commission does not have sufficient quantitative data to conclusively evaluate the five year trend of drug abuse at nuclear power plants. While the number of incidents (each involving one or more individuals) reported

to the NRC over the past five years has clearly increased during 1987 and early 1988, it is the sense of the Commission that this trend in reports is probably attributable to (1) the establishment of formal fitness-for-duty programs, including for-cause testing and some random testing during 1985 and 1986, and (2) the promulgation of formal NRC guidance on reporting of drug abuse cases at operating nuclear power plants during 1987.

QUESTION 6A. Over the past few years, Peach Bottom has been issued hundreds of thousands of dollars in fines and has been listed by the NRC as one of the worst run plants in the U.S. Nevertheless, NRC inspectors never detected operators asleep, literally at the switch. It is further my understanding that power stations that are known as problem plants are assigned additional hours of inspection by the NRC. Is that correct?

ANSWER.

The performance at this plant has been of concern to the NRC for quite some time as evidenced, for example, by the assessment of six civil penalties against the licensee for various violations of NRC regulatory requirements since March 1983. Issues that continued to be of concern were identified in June 1986 in the staff's Systematic Assessment of Licensee Performance (SALP) report, which concluded that management involvement and effectiveness towards improving activities had not been evident. An NRC inspector did observe one case of a Peach Bottom operator apparently sleeping on watch at about 5:00 a.m. on June 10, 1985. The incident was represented by PECo to the NRC in an enforcement conference as a unique isolated event. NRC believed this to be the case. In the past, incidents of sleeping or inattentiveness of licensee personnel have been difficult for NRC inspectors to detect because licensee employees may have been notified or otherwise became aware of NRC's presence onsite. The NRC has issued a proposed rule which would ensure that the presence of NRC inspectors on site is not announced or otherwise communicated to licensee and contractor personnel without the expressed request to do so by the inspector. This change will allow NRC inspectors who are badged at the facility to observe ongoing activities as they are being performed, without possible changes to attention and performance levels based on employees' knowledge of NRC surveillance and should enhance NRC's ability to detect problems such as that which occurred at Peach Bottom.

Because of the poor SALP ratings, inspection hours were increased at Peach Bottom, as they would be at any problem plant. In addition, the number of resident inspectors was increased from two to three late in 1986, and a fourth inspector was assigned for the months of January and February 1987.

As a point of comparison, we are providing the following information. Available NRC inspection resources in the Region I (Philadelphia) office are allocated among 29 power reactor units located at 20 reactor sites. Three of these sites (Peach Bottom, Calvert Cliffs, Salem) are somewhat similar in that each site has two large reactor units which have been in commercial power operation for more than five years. The following table shows the approximate number of NRC inspection hours devoted to these three sites from 1982 through 1987. The inspection hours for calendar years 1985 and 1987 are split to show the "before" and "after" hours associated with Peach Bottom events involving an inattentive operator in early 1985 and the plant shutdown in early 1987:

DIRECT INSPECTION HOURS

PLANT	1982	1983	1984	1985 (3 MO)	1985 (9 MO)	1986	1987 (3 MO)	1987 (9 MO)
Peach Bottom	4,019	2,729	2,423	1,786	3,778	3,724	994	4,871
Calvert Cliffs	3,930	2,973	3,042	667	2,749	2,997	329	2,525
Salem	3,684	3,420	3,441	977	2,476	2,258	602	2,620
3 Site Avg.	3,878	3,041	2,969	1,143	3,001	2,993	642	3,339

The above data shows that, during 1982, NRC's inspection resources at these three similar facilities were allocated on approximately an even basis. Operational events involving the failure of the reactor protection system at Salem in early 1983 resulted in inspection emphasis at this facility during 1983 and 1984. Since 1984, indications of operational problems at Peach Bottom have in each year resulted in additional NRC inspection effort beyond that applied to Calvert Cliffs or Salem.

These figures speak to the relative inspection efforts at three Region I facilities. The absolute level of inspection at any facility during any given year is also dependent upon regulatory performance and the status (construction, preoperational testing, startup, operations) of the other 23 power reactor units in Region I.

QUESTION 6B. At the time of Peach Bottom's shutdown, had the number of inspectors on site been increased to reflect the situation -- that is, the poor performance and violations at the plant? If not, why not?

ANSWER.

As indicated in Question 6A above, NRC increased the number of resident inspectors from two to three in late 1986. Also, the number of specialist inspections was increased. On March 24, 1987, the NRC received an allegation that operators were sleeping on duty and immediately stationed inspectors in the control room around the clock. The allegation was investigated and substantiated, and the plant was shut down on March 31, 1987. At midnight on April 2, 1987, the 24-hour inspector coverage was stopped.

QUESTION 6C. Did NRC inspectors know about the problems that led to the shutdown? When did they become aware of these problems?

ANSWER.

Although the NRC inspectors were aware of problems of poor performance at Peach Bottom for some time, they were not aware of pervasive licensed operator inattentiveness on the backshift until an allegation was received on March 24, 1987.

QUESTION 6D. When the NRC inspectors became aware of the problems, did they report them? When? To whom?

ANSWER.

The NRC inspectors were aware of the problems of poor performance at Peach Bottom for some time. The findings of the Resident Inspectors were reported to NRC Region I management in their routine monthly inspection reports. Several other specialist inspect on teams were sent to Peach Bottom in 1985-87, and their findings were reported o NRC management in formal inspection reports. As stated in the answer to Question 6C, the NRC inspectors were not aware of pervasive licensed operator inattentiveness on the backshift until an allegation was received in the NRC Incident Response Center at Headquarters on March 24, 1987.

QUESTION 6E. Were these reports read at the regional level?

ANSWER.

The Regional offices maintain very close contact with the site resident inspectors and a current knowledge of the problems and activities at each site. Resident inspector and specialist inspector inspection reports are reviewed and approved by at least two levels of management at the Region. In the Peach Bottom case, the inspectors' findings were reviewed and discussed among senior NRC managers on a regular basis.

QUESTION 6F. If the reports were being read at the regional level, were the personnel at the regional office relaying the information to headquarters? Why did it take the NRC so long to take action against the plant?

ANSWER.

As stated in the answer to Question 6E, the senior managers in NRC Headquarters and Region I regularly reviewed the reports about problems at Peach Bottom, including the findings of NRC inspectors. As a result of these meetings, NRC increased its inspection coverage of Peach Bottom and met with licensee senior management in August 1986 in Bethesda, Maryland, to clearly state its concerns and demand that improvements be made in operations at the site.

When the NRC identifies long-standing, poor performance trends at a nuclear power plant, the first step is to increase inspection activities and also meet with licensee management to determine what the problem is and how the licensee proposes to correct it. Far-reaching NRC actions, such as ordering a plant shut down, are not usually taken unless other enforcement avenues (e.g., management or enforcement conferences, civil penalties for identified violations) have been exhausted or unless a specific condition exists that is in itself clearly adverse to nuclear safety. In late 1986, Peach Bottom was clearly identified as a poor performer; however, it was the judgment of NRC management that Peach Bottom was sufficiently safe to justify continued operation while known conditions were being corrected. Once NRC substantiated operator inattentiveness as a condition adverse to safety, the staff acted promptly to order the plant shut down.

186, 234, 68 Stat. 955, 83 Stat. 444, as amended (42 U.S.C. 2236, 2282); sec. 206, 88 Stat. 1246 (42 U.S.C. 5846). Sections 2.600-2.606 also issued under sec. 102, Pub. L. 91-190, 83 Stat. 853 as amended (42 U.S.C. 4332). Sections 2.700a, 2.719 also issued under 5 U.S.C. 554. Sections 2.754, 2.760, 2.770 also issued under 5 U.S.C. 557. Section 2.790 also issued under sec. 103, 68 Stat. 936, as amended (42 U.S.C. 2133) and 5 U.S.C. 552. Sections 2.800 and 2.808 also issued under 5 U.S.C. 553. Section 2.809 also issued under 5 U.S.C. 553 and sec. 29, Pub. L. 85-256, 71 Stat. 579, as amended (42 U.S.C. 2039). Subpart K also issued under sec. 189, 68 Stat. 955 (42 U.S.C. 2239); sec. 134, Pub. L. 97-425, 96 Stat. 2230 (42 U.S.C. 10154). Appendix A also issued under sec. 6, Pub. L. 91-560, 84 Stat. 1473 (42 U.S.C. 2135). Appendix B also issued under sec. 10, Pub. L. 99-240, 99 Stat. 1842 (42 U.S.C. 2021b et seq.).

2. Section V.F. of Appendix C is revised to read as follows:

Appendix C—General Statement of Policy and Procedure for NRC Enforcement Actions

* * * * *

V. Enforcement Actions * * *

F. Reopening Closed Enforcement Actions

If significant new information is received or obtained by NRC which indicates that an enforcement sanction was incorrectly applied, consideration may be given, dependent on the circumstances, to reopening a closed enforcement action to increase or decrease the severity of a sanction or to correct the record. Reopening decisions will be made on a case-by-case basis, are expected to occur rarely, and require the specific approval of the Deputy Executive Director for Regional Operations.

* * * * *

Dated at Washington, DC, this 17th day of March 1988.

For the Nuclear Regulatory Commission.

Samuel J. Chilk,

Secretary of the Commission.

[FR Doc. 88-6333 Filed 3-22-88; 8:45 am]

BILLING CODE 7590-01-M

---

10 CFR Part 50

Final Commission Policy Statement on Maintenance of Nuclear Power Plants

AGENCY: Nuclear Regulatory Commission.

ACTION: Final policy statement.

SUMMARY: The Commission believes safety can be enhanced by improving the effectiveness of maintenance programs throughout the nuclear industry. The Commission is proceeding with rulemaking consistent with this belief. This Policy Statement is being issued to provide guidance to the industry while the rulemaking proceeds.

EFFECTIVE DATE: This Final Policy Statement is effective March 23, 1988.

FOR FURTHER INFORMATION CONTACT: Jack W. Roe, Director, Division of Licensee Performance and Quality Evaluation, Office of Nuclear Reactor Regulation, U.S. Nuclear Regulatory Commission, Washington, DC 20555, telephone (301) 492-1004.

Policy

Background

The Commission has a program to continually evaluate the operational performance of nuclear power plants. Analysis of operational events has shown that, in some cases, nuclear power plant equipment is not being maintained at a level which ensures, with a high degree of reliability, that the equipment will perform its intended function when required. A limited NRC examination of nuclear power plant maintenance programs has found a wide variation in the effectiveness of these programs. Inadequate maintenance at some plants has been a significant contributor to plant reliability problems and, hence, is of safety concern. The Commission believes safety can be enhanced by improving the effectiveness of maintenance programs throughout the nuclear industry. The Commission is proceeding with rulemaking consistent with this belief. This Policy Statement is being issued to provide guidance to the industry while the rulemaking proceeds.

Policy Statement

It is the objective of the Commission that all components, systems and structures of nuclear power plants be maintained so that plant equipment will perform its intended function when required. To accomplish this objective, each licensee should develop and implement a maintenance program which provides for the periodic evaluation, and prompt repair of plant components, systems and structures to ensure their availability.

Definition of Maintenance

The Commission defines maintenance as the aggregate of those functions required to preserve or restore safety, reliability, and availability of plant structures, systems, and components. Maintenance includes not only activities traditionally associated with identifying and correcting actual or potential degraded conditions, i.e., repair, surveillance, diagnostic examinations, and preventive measures; but extends to all supporting functions for the conduct of these activities. Those activities and functions are listed below under "Activities Which Form the Basis of a Maintenance Program."

Maintenance Programs

Each commercial nuclear power plant should develop and implement a well-defined and effective program to assure that maintenance activities are conducted to preserve or restore the availability, performance and reliability of plant structures, systems, and components. The program should clearly define the components and activities included, as well as the management systems used to control those activities. Further, the program should include feedback of specific results to ensure corrective actions, provisions for overall program evaluation, and the identification of possible component or system design problems.

Activities Which Form the Basis of a Maintenance Program

An adequate program should consider:

- Technology in the areas of
  - —Corrective maintenance,
  - —Preventive maintenance,
  - —Predictive maintenance,
  - —Surveillance;
- Engineering support and plant modifications;
- Quality assurance and quality control;
- Equipment history and trending;
- Maintenance records;
- Management of parts, tools, and facilities;
- Procedures;
- Post-maintenance testing and return-to-service activities;
- Measures of overall program effectiveness;
- Maintenance management and organization in the areas of
  - —Planning,
  - —Scheduling,
  - —Staffing,
  - —Shift coverage,
  - —Resource allocation;
- Control of contracted maintenance services;
- Radiological exposure control (ALARA);
- Personnel qualification and training;
- Internal communications between the maintenance organization and plant operations and support groups;
- Communications between plant and corporate management and the maintenance organization.

Maintenance recommendations or requirements of individual vendors should receive appropriate attention in the development of the maintenance program.

Future Commission Action

The Commission intends this Policy Statement to provide guidance to the industry in improving maintenance programs for their power reactor facilities. The Commission will continue to enforce existing requirements including those that address maintenance practices and will take whatever action that may be necessary to protect health and safety.

The Commission expects to publish a Notice of Proposed Rulemaking in the near future that will establish basic requirements for plant maintenance programs. We believe that the contents and bounds of the proposed rule will fall within the general framework described in this Policy Statement.

Consideration will also be given to industry-wide efforts that already have been initiated. We encourage interested parties to provide their views on this important subject to the Commission, even at this early stage of the rulemaking process. Any notice of proposed rulemaking that is published will provide, of course, a period for public comment on its contents.

Dated at Washington, DC, this 17th day of March, 1988.

For the Nuclear Regulatory Commission.

Samuel J. Chilk,

Secretary of the Commission.

[FR Doc. 88-6334 Filed 3-22-88; 8:45 am]

BILLING CODE 7590-01-M

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket Number 86-ANE-21; Amdt. 39-5869]

Airworthiness Directives; General Electric (GE) CT7-5A, -5A1, and -5A2 Turbopropeller Engines as Installed in Saab-Fairchild SF340A Aircraft

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule.

SUMMARY: This amendment adopts a new airworthiness directive (AD) which requires the installation of a second overspeed protection system on certain GE CT7-5A series turbopropeller engines as installed in Saab-Fairchild SF340A aircraft. This AD also supersedes AD 86-10-51, Amendment 39-5473 (51 FR 44439; December 9, 1986). This AD is needed to prevent engine power turbine (PT) overspeed and resulting uncontained failure caused by reaction of the fuel control to an erroneous PT speed signal during ground operation with the bottoming governor (BG) enabled.

DATES: *Effective*—May 9, 1988.

Compliance Schedule—As prescribed in the body of the AD.

Incorporation by Reference—Approved by the Director of the Federal Register as of May 9, 1988.

ADDRESSES: The applicable service bulletins (SB's) may be obtained from Dowty Rotol Limited, Cheltenham Road East, Gloucester, England GL2 9QH; General Electric Company, 1000 Western Avenue, Lynn, Massachusetts 01910; and Saab-Scania AB, S-581 88, Linkoping, Sweden.

A copy of each SB is contained in Rules Docket Number 86-ANE-21, in the Office of the Regional Counsel, Federal Aviation Administration, New England Region, 12 New England Executive Park, Burlington, Massachusetts 01803, and may be examined between the hours of 8:00 a.m. and 4:30 p.m., Monday through Friday, except Federal holidays.

FOR FURTHER INFORMATION CONTACT: Barbara Garian, Engine Certification Branch, ANE-141, Engine Certification Office, Aircraft Certification Division, Federal Aviation Administration, New England Region, 12 New England Executive Park, Burlington, Massachusetts 01803; telephone (617) 273-7086.

SUPPLEMENTARY INFORMATION: A proposal to amend Part 39 of the Federal Aviation Regulations (FAR) to include a new AD requiring the installation of a second overspeed protection system on certain GE CT7-5A series turbopropeller engines as installed in Saab-Fairchild SF340A aircraft was published in the Federal Register on October 16, 1987, (52 FR 38458).

The proposal was prompted by an engine PT overspeed and resulting uncontained failure caused by reaction of the fuel control to an erroneous PT speed signal during ground operation with the BG enabled.

Since this condition is likely to exist or develop on other engines of the same type design, a new AD is being issued that requires installation of a second overspeed protection system on GE CT7-5A series turbopropeller engines as installed in Saab-Fairchild SF340A aircraft. This AD also requires incorporation of engine BG deactivation switches in the power lever quadrant to prevent an adverse yaw condition in the aircraft that could occur due to a mismatched aircraft power condition resulting from an uncommanded power increase of one engine. This would also prevent the crew from misinterpreting the uncommanded power increase of one engine as a failure of the other engine. This AD supersedes AD 86-10-51, Amendment 39-5473 (51 FR 44439; December 9, 1986).

Interested persons have been afforded an opportunity to participate in the making of this amendment. No comments were received. Accordingly, the proposal is adopted without change.

AD 86-10-51, Amendment 39-5473 (51 FR 44439), issued November 18, 1986, requires that the engine BG be disabled when the aircraft power lever is positioned in the beta range (below flight idle). The AD was needed to prevent PT overspeed and resulting uncontained failure caused by reaction of the fuel control to an erroneous PT speed signal during ground operation with the BG enabled.

AD 86-10-51 provides interim instructions to prevent PT overspeed and uncontained failure. Since these instructions require special aircraft and engine operating procedures which increase crew workload and invalidate the constant torque on takeoff function, the FAA has determined that a second overspeed protection system with an improved level of safety precludes the need for these interim instructions and returns the aircraft and engine to pre-AD 86-10-51 operation.

Conclusion

The FAA has determined that this regulation affects 107 aircraft all of which are in compliance with this AD. Therefore, I certify that this action (1) is not a "major rule" under Executive Order 12291; (2) is not a "significant rule" under DOT Regulatory Policies and Procedures (44 FR 11034; February 26, 1979); (3) does not warrant preparation of a regulatory evaluation as the anticipated impact is minimal; and (4) will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

List of Subjects in 14 CFR Part 39

Engines, Air transporation, Aircraft, Aviation safety, Incorporation by reference.

Adoption of the Amendment

Accordingly, pursuant to the authority delegated to me, the Federal Aviation Administration (FAA) proposes to amend Part 39 of the Federal Aviation Regulations (FAR) as follows:

PART 39—[AMENDED]

1. The authority citation for Part 39 continues to read as follows:

JOHN BREAUX
LOUISIANA

COMMITTEES:
AGRICULTURE, NUTRITION, AND FORESTRY
COMMERCE, SCIENCE AND TRANSPORTATION
ENVIRONMENT AND PUBLIC WORKS
SPECIAL COMMITTEE ON AGING

United States Senate

WASHINGTON, DC 20510

WASHINGTON OFFICE
(202) 224-4623

ALEXANDRIA OFFICE
534 MURRAY STREET
ALEXANDRIA, LA 71301
(318) 473-7370

LAFAYETTE OFFICE
THE FEDERAL BUILDING
705 JEFFERSON STREET
ROOM 103
LAFAYETTE, LA 70501
(318) 264-6871

MONROE OFFICE
WASHINGTON SQUARE ANNEX BUILDING
211 NORTH 3RD STREET
ROOM 102A
MONROE, LA 71201
(318) 325-3320

NEW ORLEANS OFFICE
HALE BOGGS FEDERAL BUILDING
500 CAMP STREET
SUITE 1005
NEW ORLEANS, LA 70130
(504) 589-2531

April 15, 1988

Honorable W. Zech, Jr.
Chairman
Nuclear Regulatory Commission
One White Flint North
11555 Rockville Pike
Rockville, Md. 20555

Dear Mr. Chairman:

As a further follow-up to our recent hearing regarding the Commission's budget request for fiscal 1989, I have enclosed with this letter additional questions from Senator Mikulski. Your expeditious response to the enclosed would be deeply appreciated.

Sincerely,

John

John Breaux
Chairman
Subcommittee on
Nuclear Regulation

QUESTIONS OF SENATOR MIKULSKI
FOR THE NUCLEAR REGULATORY COMMISSION

NRR (1)(a) What criteria will be applied by the NRC for measuring the changes that need to be taken before the Peach Bottom nuclear plant can be restarted?

(b) How will the NRC determine and apply these criteria?

(c) What will the involvement of the public be in the restart decision?

NRR (2) In November of last year, PECO submitted their original plan for the restart of Peach Bottom. On January 11 of this year, the Institute of Nuclear Power Operations (INPO) issued a report that was highly critical of the PECO plan, stating that it was "insufficient to bring about the necessary change." What actions have been taken by PECO since that time and have these actions been deemed adequate to address and correct the problems that have been identified by either the NRC or INPO?

RI (3)(a) It is my understanding that there are numerous maintenance items outstanding at Peach Bottom. In fact, it is my understanding that there are over 1,500 items in need of maintenance activities of one sort or another. How many outstanding maintenance items does the NRC believe exist at the plant?

(b) Please explain why there are so many outstanding maintenance items?

(c) Are the number of outstanding maintenance items at the Peach Bottom plant above average, average, or below average for the industry as a whole?

(d) Please provide a list of those outstanding maintenance items that the NRC believes have a significant safety related implication.

(e) What type of improvements in the maintenance program at Peach Bottom will the NRC insist on before it allows the plant to reopen?

NRR (4)(a) Employees at Peach Bottom have been indicted for possession and/or use of illegal substances while on the job. How does the NRC propose to correct the problem of drug abuse at Peach Bottom?

(b) Is PECO's fitness-for-duty program adequate to detect drug abuse at Peach Bottom?

NRR (5)(a) What is the status of the NRC's current efforts to curtail drug abuse by personnel at nuclear power plants?

(b) Does the NRC believe that its current policy is an adequate way to implement fitness for duty programs, including drug testing, at nuclear power plants?

(c) What is the NRC's position on random testing?

(d) How many nuclear power plants have random testing programs in place?

(e) How many incidents, nationwide, of drug abuse at nuclear power plants is the NRC aware of? Is the problem getting worse or better over the past five years?

RI (6)(a) Over the past few years, Peach Bottom has been issued hundreds of thousands of dollars in fines and has been listed by the NRC as one of the worst run plants in the U.S. Nevertheless, NRC inspectors never detected operators asleep, literally at the switch. It is further my understanding that power stations that are known as problem plants are assigned additional hours of inspection by the NRC. Is that correct?

(b) At the time of Peach Bottom's shut-down, had the number of inspectors on site been increased to reflect the situation--that is, the poor performance and violations at the plant? If not, why not?

(c) Did NRC inspectors know about the problems that led to the shut-down? When did they become aware of these problems?

(d) When the NRC inspectors became aware of the problems, did they report them? When? To whom?

(e) Were these reports read at the regional level?

(f) If the reports were being read at the regional level, were the personnel at the regional office relaying the information to headquarters? Why did it take the NRC so long to take action against the plant?