

Enclosure 1

Action Plan for Management Controls

Response to Department of Energy Letters
Dated April 25, 1996 and May 20, 1996

Prepared by
United States Enrichment Corporation

June 14, 1996

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1.0 INTRODUCTION

By letter dated April 25, 1996, the Department of Energy (DOE) requested that USEC provide an action plan for increasing its overall management involvement in assuring safe operation of the GDPs. DOE stated that the action plan shall include:

1. An overall assessment and status of USEC's management controls that assure safe operation of the GDPs;
2. A detailed description of the actions that USEC has taken and will undertake... to strengthen its management controls over the following:
 - a. Procedure development, implementation, control, maintenance, and adherence;
 - b. Corrective action dispositioning, adequacy, and use of lessons learned; and
 - c. Maintenance of the integrity of and adherence to the authorization basis.
3. Designation of the management organization and management individual... responsible for defined actions and authorities.

This document identifies the actions USEC is taking and will take to improve operational management controls. The assessment of management controls and progress achieved and actions taken to improve management controls since the April 1994 enforcement conference are presented in Enclosure 2 to this letter.

2.0 ACTION PLAN

This section summarizes planned actions presented in Sections 2.1 through 2.3 of Enclosure 2, entitled, "Assessment and Status of USEC Management Controls". Taken together, these actions constitute the action plan requested by DOE's May 20, 1996 letter to USEC.

2.1 Procedure Adequacy and Use

Actions Planned

USEC is taking the actions described below to achieve the goals of procedure adequacy and use.

1. A procedure has been approved for the process of identifying regulatory commitments and ensuring that they are appropriately incorporated into policies and procedures. Because of the large number of commitments in the application a special process, based on the procedure, has been developed. This process is documented and started on June 7, 1996.
2. USEC will complete the upgrade of site procedures as defined in the Procedures Upgrade Program consistent with the schedule shown in the Compliance Plan.
3. As indicated in the Compliance Plans, organizational roles and responsibilities provided in Section 6.1 of the Application will be flowed-down to committed position descriptions and position descriptions will be reviewed and revised, if necessary, with the completion of the procedures upgrade effort.
4. In the near term, USEC is taking the following steps to improve procedure quality and adherence:
 - a. Providing training to hourly operations and maintenance personnel on procedure use and adherence.
 - b. Providing training on procedure use, development, and control to managers and other plant professionals involved in the procedure process.
 - c. During the flowdown of TSRs (part of the overall flowdown effort mentioned above), reevaluating procedures for the proper use category.

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- d. Reviewing the technical adequacy of all procedures past their periodic review dates.

These near-term actions will be completed by December 31, 1996.

5. USEC will revise the QOOP initiative on conduct of operations by July 15, 1996.

Schedule for Completion and Responsible Positions

The Nuclear Regulatory Affairs Managers at each site are responsible for Action 1. Actions 2 and 4 are the responsibility of the Procedures Upgrade Project Manager. Action 3 is the responsibility of the Vice President of Production. The USEC Production Support Manager is responsible for Action 5. Completion dates are as noted above.

2.2 Corrective Actions

Actions Planned

1. We will revise and, where feasible, consolidate the existing procedures that constitute the corrective action process to provide clear direction, accountability and responsibilities, and establish clear procedure interfaces. Procedure revisions will be completed and implemented by August 31, 1996.
2. Selected managers and selected other individuals will be trained in root cause analysis and corrective action plan development by September 30, 1996.
3. Corrective action performance indicators will be developed and provided to management during August 1996.
4. (a) The MAAT at PGDP and the CARB at PORTS will perform a review of open SCAQ corrective action plans against the revised SCAQ criteria. This review will be performed following a review of the open corrective action plans to the revised SCAQ criteria and will be completed by September 30, 1996.

(b) Corrective action plans found in the aforementioned review to need improvement will be revised by the functional managers responsible for those

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corrective action plans. The corrective action plans will be revised as necessary by September 30, 1996.

5. We will conduct monthly surveillance of selected corrective actions to monitor improvements in effectiveness starting in August 1996 and ending no earlier than January 1997. Appropriate actions will be taken based on the results of these surveillances.
6. We will conduct previously planned audits of the corrective action process to monitor effectiveness of corrective action process improvements in October 1996.

Schedule for Completion and Responsible Positions

Action 1 is the responsibility of the Quality Assurance Supervisor. Actions 2 and 3 are the responsibility of the PORTS and PGDP Commitment Management Managers. Completion of Action 4(a) is the responsibility of the MAAT at PGDP and the CARB at PORTS. Completion of Action 4(b) is the responsibility of the functional managers responsible for the affected corrective action plans. Completion of Actions 5 and 6 will be the responsibility of the SS&Q Managers at both sites. Completion dates for all tasks are as noted above.

2.3 Maintenance of and Adherence to Authorization Basis

Actions Planned

1. To address deficiencies in the procedural infrastructure associated with the identification and dispositioning of as-found conditions, a review of the existing procedures will be conducted to develop appropriate changes. This review will be completed by September 30, 1996.
2. Upon completion of the required changes, personnel responsible for dispositioning and reviewing as-found items will receive training to reinforce management expectations regarding these requirements. The procedure revisions and associated training will be completed by September 30, 1996.
3. The as-found conditions identified through the SAR preparation will be dispositioned as described in the response to the DOE Order for Action at PORTS and per the existing schedule established in the Problem Report at PGDP (therefore Action 3 is not a new regulatory commitment).

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4. Specific indicators to monitor compliance and performance trends will be developed by July 31, 1996. Using those indicators, compliance with the authorization basis will be monitored on an ongoing basis and appropriate recommendations provided for potential performance improvements.

Schedule for Completion and Responsible Positions

Completion of Planned Actions 1 and 4 is the responsibility of the USEC NRAP Manager. Completion dates for actions 1 and 4 are as noted above.

The NRA Managers at each of the respective facilities will be responsible for Planned Action 2. Action 2 will be completed on the schedule presented above. Action 3 will be completed as described in the response to the DOE Order for Action.

Enclosure 2

Assessment and Status of
USEC Management Controls

Response to Department of Energy Letters
Dated April 25, 1996 and May 20, 1996

Prepared by
United States Enrichment Corporation

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1.0 OVERVIEW AND OVERALL ASSESSMENT

In letters dated April 25, 1996 and May 20, 1996, the Department of Energy (DOE) requested the following information from USEC:

1. An overall assessment and status of USEC's management controls that assure safe operation of the GDPs;
2. A detailed description of the actions that USEC has taken and will undertake... to strengthen its management controls over the following:
 - a. Procedure development, implementation, control, maintenance, and adherence;
 - b. Corrective action dispositioning, adequacy, and use of lessons learned, and
 - c. Maintenance of the integrity of and adherence to the authorization basis.
3. Designation of the management organization and management individual... responsible for defined actions and authorities.

This report supplements the verbal responses USEC provided to the DOE request at the May 9, 1996 management conference in Oak Ridge, Tennessee, and the June 11, 1996 regulatory issues meeting in Bethesda, Maryland. Sections 1.1 through 1.3 provide the overall assessment and status of USEC's management controls. Sections 2.1 through 2.3 provide the detailed description of actions USEC has taken or will undertake to strengthen controls over procedures, corrective action, and the authorization basis. Sections 3.1 through 3.5 describe other management controls which complete the controls used by USEC to assure safe operation of the GDPs. A companion document, the Action Plan for Management Controls, summarizes the commitments made in Section 2.1 through 2.3.

1.1 Overall Assessment

USEC's overall assessment of management controls is derived from assessment of the eight elements of management controls which are defined in Section 1.2 below. Assessments of the eight elements are based on examination of the goal for each element, the status of that element, and the actions planned to achieve the goal for that element. The overall assessment integrates significant points noted in the individual assessments summarized in Section 2.0. In

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addition, the overall assessment compares the current effectiveness of management controls against the overall goals and obligations for GDP operations.

Goals for GDP Operations

USEC's top goal for operation of the gaseous diffusion plants (GDPs) is to assure the safety of the public, workers, and the environment. Judging by USEC's accomplishments since its formation in 1993, the corporation has met this goal. USEC "inherited" plants with a history of more than 40 years of safe operation under DOE management, and personnel, practices and procedures which contributed to that record of safety and achievement. That history of safe operation has continued under USEC management.

Nevertheless, USEC recognizes that the GDPs must continuously improve the margins of nuclear safety. The experience of the commercial nuclear industry shows that all nuclear facilities must meet ever higher expectations for safety and increased safety margins. USEC is dedicated to continuous and measurable improvement in the safety and performance of the GDPs, as shown by the number of improvements discussed at the May 9, 1996 management conference and the associated increase in margins of safety since July 1, 1993. USEC agrees with DOE that additional, substantial improvements in safety and performance are possible and worth seeking to support the transition to an NRC-regulated, private entity.

Competing Priorities

USEC acknowledges that its resources have been strained trying simultaneously to meet the demands of (1) continued safe operation of the GDPs; (2) implementing the requirements of the Regulatory Oversight Agreement (ROA); (3) preparing the application for NRC certification and responding to NRC questions; and (4) preparing for privatization. The strain imposed by these simultaneous demands was recognized as a possibility under the Energy Policy Act of 1992.

The apparent conflict between implementing ROA requirements and readying the plants to meet NRC requirements was recognized in Article IV of the ROA, which states that DOE will "...attempt to facilitate the transition to compliance with the regulatory standards and requirements likely to be imposed...by the NRC..." This "bias" toward NRC requirements has driven much of what USEC management has tried to accomplish since the April 1994 enforcement conference. USEC has honored its obligation to meet its commitments to DOE under the ROA and has maintained a high level of focus on safety, while at the same time preparing for a prompt and smooth transition to NRC requirements, in order to fulfill its Congressional mandate. USEC will soon complete the documentation required for certification

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of the GDPs, allowing the corporation to devote even more time and energy to safety and performance improvement activities.

Ongoing Activities

As part of the Certification activities, USEC has made numerous commitments to improvements in plant material condition, practices and personnel. These commitments have been discussed with DOE and included in the Compliance Plan prepared by DOE. Many of these were in addition to improvements incorporated into USEC's Quality of Operations Plan (QOOP). Wherever feasible, this assessment of management controls has taken advantage of the Compliance Plan and QOOP initiatives. Where existing initiatives do not appear to respond to the weaknesses identified in this assessment, USEC has identified new actions or adjusted planned or ongoing improvements as necessary. Wherever appropriate, USEC has set challenging goals and aggressive schedules for achieving measurable improvement in the DOE-identified areas of weakness.

Integrated Analysis of Resource Allocations

USEC has recognized a generic weakness in the management infrastructure of the GDPs. The plants have not developed an integrated analysis of NRC readiness-related work activities showing their impacts on available resources. This has decreased confidence in our ability to fulfill our commitments on schedule. The plants are now assembling this important management tool. When completed, this integrated, resource-loaded analysis will permit USEC management to determine quickly where additional resources can be most effective in supporting critical commitments and what impacts new commitments would have on existing schedules.

Overall Conclusion

This report clarifies USEC's goals in each of the areas mentioned in the DOE letters. This report also describes USEC's plans for improvement in those areas and puts into perspective what has been accomplished since the April 1994 enforcement conference. USEC believes that the information presented in this report shows that the corporation's management controls will continue to assure safe operation of the GDPs and planned actions will further enhance safety margins. It is our belief that this report, followed by concrete evidence of continuing improvement in performance at the GDPs in the months ahead, will provide DOE confidence that USEC's management controls continue to assure safe operation of the GDPs.

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1.2 Definition of Management Controls

At the May 9, 1996 management conference, DOE described its view of management controls. According to DOE, management controls are "...those management programs and practices that allow the responsible USEC management to know the level of conformance to the authorization/certification basis at all times and that ensures [sic] regulatory commitments are being accomplished as committed."

USEC defines "management controls" as those programs and practices that assure the GDPs are operating safely and in accordance with regulatory requirements. We believe this is consistent with the definition presented by DOE at the May 9, 1996 management conference. The elements of USEC's management controls that assure safe operation of the GDPs are:

1. Policy/Procedure: Policies and procedures provide the framework that standardizes how work is accomplished. They are the principal means by which regulatory requirements and commitments, other requirements, and management direction are communicated to workers and implemented in the workplace. Adherence to policies and procedures enables personnel to perform assigned tasks in a consistent manner in conformance with management direction (which includes conformance with regulatory requirements).
2. Corrective Action Process: Numerous processes are important to the success of a nuclear organization. Perhaps none is more important than an effective process for corrective actions. The corrective action process must ensure that problems are identified, mitigated as necessary, assessed for significance, analyzed, and addressed with appropriate, comprehensive and timely actions to prevent recurrence.
3. Performance Measures: Management monitors the effectiveness of key processes through performance measures that reveal the "health" of the organization. A key part of the performance measures is a set of performance indicators tailored to the interests of various levels of management. Performance measures provide the feedback necessary for management to gauge the effectiveness of its directions in improving performance of the GDPs. Ideally, performance measures provide clear and timely insights into how the GDPs stand relative to past performance, relative to each other, and relative to comparable commercial nuclear experience.
4. Audits, Self-Assessments and Evaluations: Management of successful nuclear organizations encourages self-discovery of problems. Audits, self-assessments, and evaluations provide periodic reviews of plant operations to monitor

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compliance with regulatory requirements and safety and performance in the areas reviewed. These reviews can yield insights into the magnitude and causes of problems.

5. Interdisciplinary Line Management Review: Nuclear organizations depend upon technical specialization to succeed, yet must ensure complex problems receive appropriately detailed and integrated reviews. Multi-disciplinary reviews prior to approval are important to assure that proposed activities or changes in activities that could affect safety are undertaken only after careful and thorough consideration.
6. Organization, Selection, and Training of Personnel: One of management's key roles is ensuring that only properly qualified and trained personnel undertake activities that could affect safety. By properly defining organizational relationships, roles and responsibilities, and by defining processes for selection and training of personnel, management ensures personnel are capable of implementing policies and procedures.
7. Employee Concerns: Management depends on timely and accurate communications to maintain a clear understanding of plant operations and safety. Management also depends on employees feeling involved and responsible in all aspects of plant operation. Thus management must ensure it has a process for documenting and evaluating employee concerns. In addition, management must establish an atmosphere that makes clear concerns may be freely expressed and will receive timely and objective evaluation.
8. Reporting and Communication: Various formal and informal communications channels provide management with information necessary to exercise control over operations. These channels also provide the mechanism through which that control is exercised. At USEC, these channels include, in addition to formal policies and procedures: daily conference calls between USEC headquarters and the GDP Enrichment Plant Managers; weekly conference calls between nuclear regulatory personnel (during which the status of commitments is reviewed), quality assurance personnel, and other groups; bi-weekly reports from the Safety, Safeguards and Quality (SS&Q) Managers to the Executive Vice President - Operations; monthly senior management reports; tri-monthly senior management meetings; and periodic site visits.

Several of these elements are discussed further in Sections 2.0 and 3.0.

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2.0 ASSESSMENT OF AREAS HIGHLIGHTED BY DOE

The DOE letters requested information on management controls pertaining to three particular areas: (1) policies and procedures, (2) corrective action, and (3) maintenance of and adherence to the authorization basis. These three areas are discussed below. For each area, USEC's goal, assessment, and actions planned are presented.

2.1 Policy/Procedures

Goal

USEC is formalizing the policies and procedures that provide for improved control of nuclear activities at both GDPs and USEC Headquarters, to ensure operations are safe and efficient. To achieve this, USEC intends that its policies and procedures will (1) be complete, clear and concise; (2) integrate related activities at all sites; (3) accurately reflect regulatory requirements and an appropriate nuclear safety culture; (4) be appropriately controlled and disseminated; and (5) be strictly adhered to.

Status

USEC has worked to improve both adherence to procedures and the quality of procedures simultaneously. While communicating expectations that employees will follow procedures, USEC has also been working to improve procedures so they are more reliable and easier to follow. Through the procedures upgrade program, for example, USEC is developing procedures with more details than ever before, providing personnel with the information they need to understand what is required and accomplish it successfully.

To improve adherence to procedures, USEC has, since the April 1994 Enforcement Conference:

1. Instituted periodic crew briefings. These small-group exchanges enable senior managers to speak directly with first-line managers, group managers, and crews about selected issues or problems. The setting allows information flow directly from workers to senior management and enables senior management to communicate its expectations directly to workers.
2. Strengthened our operational drill program. Several hundred drills are held in the course of a year and each examines workers' knowledge or use of some aspect of policies or procedures.

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3. Initiated periodic advisories describing management's rising expectations. The General Managers observe signs of the plant culture, such as trends in problem reports, and cite these observations in periodic communiques to plant personnel describing areas needing improvement.
4. Instituted "sweep teams". Experienced personnel walked down procedures to assess both procedure use and quality. Once the generic problems were profiled, USEC discontinued the use of sweep teams. The improved Problem Reporting process is now used to document, trend, and resolve problems with procedure use and quality.
5. Issued formal USEC corporate policies on conduct of operations and employee discipline. These are one of several mechanisms used to communicate management's expectations for adherence to procedures.
6. Initiated leadership enhancement training. This is directed at first-line managers and group managers, to help them understand and implement senior management expectations for procedure adherence and maintenance.
7. Hired experienced coaches. Both plants have benefitted greatly from the services of 16 coaches drawn from the ranks of experienced nuclear reactor and materials personnel. These individuals have helped to guide and reinforce management's emphasis on procedural adherence and they have provided a fresh, independent perspective to help management assess progress.
8. Improved Trending Program. Both plants trend problem reports, looking for early warning of growing problems and opportunities for improvement. Graphs of these trend analyses are among those routinely reviewed by plant and senior corporate management.

To improve procedure quality, USEC has, since the April 1994 Enforcement Conference:

1. Initiated the Procedures Upgrade Project in November 1994. At that time, approximately 3000 procedures were identified for development or upgrade. As of May 1996, 1529 were upgraded and approved for use. Another 568 drafts had been completed and were being worked through the comment and approval process. Additional procedure upgrades are scheduled.
2. Initiated Recent Self-Assessment. To examine procedure quality in the field, a team of Paducah managers walked down a sample of 24 upgraded procedures in

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the last few months. Generally the managers found the procedures were useable and being followed. Three procedures were determined to be technically inadequate. (One in-hand procedure had unclear or missing steps and relied on "skill of the craft". The other two procedures had single inaccuracies - in one a test frequency was wrong and in the other a formula was incorrect.) Insights from this self-assessment are being fed back into the procedures upgrade program.

3. Developed a procedure change control process. Revision 3 of the procedure on procedures, approved May 31, 1996, flows down SAR and TSR requirements while streamlining the procedure change process.

To improve procedure control and maintenance, USEC has:

1. Revised the administrative, proceduralized program for maintaining approved procedures.
2. Established a computerized Procedures Information Management System (PIMS) to control and track approved procedures, changes to procedures, reviews (including periodic reviews), and procedure/manual distribution, and to provide real-time access to procedures information, as needed.
3. Established proceduralized, administrative requirements that working copies of procedures, primarily for maintenance activities, be made from controlled procedures.
4. Upgraded controls on controlled procedure manuals. Procedures are maintained in controlled manuals strategically located in plant facilities, updated by the owner using a controlled receipt acknowledgment process, and provided with controlled indexes maintained in the manuals. These are updated as procedure changes are released to ensure the latest version of the procedure is used.
6. Established a QOOP initiative to improve the conduct of operations at the GDPs. The intent of this initiative was to reduce procedure violations, reduce operational errors, and enhance professionalism. While improvements have been realized as a result of this initiative, our expectations have not been fully met, based on problem report root cause trends.

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Examination of Root Cause Data

In response to the DOE letters, USEC undertook an examination of the root causes of problems in procedure adequacy and use. USEC found that the predominant root causes of Significant Conditions Adverse to Quality (SCAQs) involving procedure inadequacy or failure to follow a procedure were associated with deficiencies in the line organizations' understanding of management's directions and expectations. The majority of these deficiencies arose from problems in the development, communication, application, or reinforcement of management's guidance to the line organizations. For example, a majority of SCAQs involving procedure inadequacies resulted from guidance that was missing, inaccurate or incomplete. Similarly, a majority of SCAQs involving failures to follow procedures resulted from guidance that was inadequately reinforced, inadequately communicated, or translated into roles and responsibilities that were defined inadequately such that individuals could not be held properly accountable.

From these observations, USEC concluded that the underlying issue involved in procedure inadequacies and failures to follow procedure can be traced to the "flowdown" process. The GDPs depend upon having an effective process for capturing new and changed requirements, identifying clear roles and responsibilities for fulfilling those requirements, and flowing those requirements and those roles and responsibilities down into policies and procedures in a timely and accurate manner.

Difficulty with Flowdown

One of the greatest impediments to achieving the quality of procedures necessary for procedural adherence has been the many changes in the basis for GDP procedures. In the past three years, the requirements for operation of the plants have been in a constant state of change. The applicable requirements have gone from DOE Orders to the Regulatory Oversight Agreement (ROA) and continue to evolve today. It has been difficult to keep the thousands of procedures at the two GDPs up to date with all the changes in applicable requirements.

With the submittal of Revision 3 of the Certification Application and the pending certification, the requirements and commitments by which the GDPs must operate will stabilize. Stabilization of the requirements and commitments will enable us to proceed to incorporate them into procedures and, thereby help in achieving higher and more consistent levels of procedural adherence. When combined with stabilization of the TSRs and submittal of Revision 3 of the Application, the actions described below will enable us to achieve our goals for procedure quality and adherence.

Actions Planned

USEC is taking the actions described below to address the problems mentioned above.

1. A procedure has been approved for the process of identifying regulatory commitments and ensuring that they are appropriately incorporated into policies and procedures. Because of the large number of commitments in the application a special process, based on the procedure, has been developed. This process is documented and started on June 7, 1996
2. USEC will complete the upgrade of site procedures as defined in the Procedures Upgrade Program consistent with the schedule shown in the Compliance Plan.
3. As indicated in the Compliance Plans, organizational roles and responsibilities provided in Section 6.1 of the Application will be flowed-down to committed position descriptions and position descriptions will be reviewed and revised, if necessary, with the completion of the procedures upgrade effort.
4. In the near term, USEC is taking the following steps to improve procedure quality and adherence:
 - a. Providing training to hourly operations and maintenance personnel on procedure use and adherence.
 - b. Providing training on procedure use, development, and control to managers and other plant professionals involved in the procedure process.
 - c. During the flowdown of TSRs (part of the overall flowdown effort mentioned above), reevaluating procedures for the proper use category.
 - d. Reviewing the technical adequacy of all procedures past their periodic review dates.

These near-term actions will be completed by December 31, 1996.

5. USEC will revise the QOOP initiative on conduct of operations by July 15, 1996.

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Schedule for Completion and Responsible Positions

The Nuclear Regulatory Affairs Managers at each site are responsible for Action 1. Actions 2 and 4 are the responsibility of the Procedures Upgrade Project Manager. Action 3 is the responsibility of the Vice President of Production. The USEC Production Support Manager is responsible for Action 5. Completion dates are as noted above.

2.2 Corrective Action Process

Goal

The corrective action process should provide for the prompt identification, evaluation, and comprehensive correction of problems such that they do not recur.

Status

The first step in the corrective action process is identifying problems and communicating them to management. We realized late in 1994 that the process for problem identification needed improvement to empower and encourage employees to identify problems when discovered. The General Managers took aggressive action to develop an improved problem identification process called Problem Reporting. The Problem Reporting procedure was implemented in March 1995. As a result there has been a dramatic increase in the number of problems reported to management. The number of problems identified jumped by a factor of almost six at Paducah and almost a factor of four at Portsmouth. Results for 1996 to date indicate that we can expect to exceed the numbers seen in 1995.

The next step in the process is to determine the significance of the problem, and assign the organization responsible for follow-on action. The remaining steps include performing root cause analysis, developing and implementing corrective action plans, and assessing the effectiveness of the corrective actions, as applicable.

Implementation of the root cause analysis process used at the plants has not met management expectations. Personnel, even though trained, have not attained the desired level of proficiency or consistency in root cause analysis. To improve knowledge of root cause skills in the GDPs, we provided additional root cause training for selected management individuals during the recent dual plant conference on corrective action, held June 3, 1996. Other selected individuals will be trained as discussed later in "Actions Planned".

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In early 1995, we began reviewing problem reports to determine safety significance and to apply more rigor to root cause analysis and corrective action plans. We established the category of Significant Condition Adverse to Quality (SCAQ) to better focus attention on the subset of reported problems that involve issues important to safety or quality of operations. For SCAQs, we require performance of a root cause analysis and documentation of a corrective action plan. The two plants have applied the SCAQ determination criteria somewhat differently from one another. We are working to achieve a more consistent approach.

Corrective action plans (CAPs) have improved, however, we believe that further improvement is needed to ensure corrective action plans consistently and comprehensively prevent recurrence of problems. We conducted a corrective action effectiveness audit at Portsmouth in April 1996 and results indicate that corrective action plans have not always prevented recurrence of deficiencies. Training on corrective action plan development was included in the root cause training given to management at the dual plant conference in June.

One significant change made in an effort to improve the quality and effectiveness of the corrective action process was the creation of the Management Analysis Assessment Team. At Paducah, the MAAT reviews corrective action plans for SCAQs for adequacy and completeness before the CAPs are approved. At Portsmouth, this review is done by a subcommittee of the MAAT known as the Corrective Action Review Board (CARB).

Our QOOP recognized the need to upgrade the corrective action program and identified this initiative as important to improve the margin of safety for nuclear operations. The QOOP action plan is comprehensive and includes management support, training, procedure revisions, and an effectiveness audit.

We have completed a review of the procedures comprising the corrective action process and found that they are fragmented, their interfaces with other procedures in the process are weak, and they provide weak direction and guidance to the user and need revision.

Actions Planned

1. We will revise and, where feasible, consolidate the existing procedures that constitute the corrective action process to provide clear direction, accountability and responsibilities, and establish clear procedure interfaces. Procedure revisions will be completed and implemented by August 31, 1996.
2. Selected managers and selected other individuals will be trained in root cause analysis and corrective action plan development by September 30, 1996.

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3. Corrective action performance indicators will be developed and provided to management starting in August 1996.
4. (a) The MAAT at PGDP and the CARB at PORTS will perform a review of open SCAQ corrective action plans against the revised SCAQ criteria. This review will be performed following a review of the open corrective action plans to the revised SCAQ criteria and will be completed by September 30, 1996.

(b) Corrective action plans found in the aforementioned review to need improvement will be revised by the functional managers responsible for those corrective action plans. The corrective action plans will be revised as necessary by September 30, 1996.
5. We will conduct monthly surveillance of selected corrective actions to monitor improvements in effectiveness starting in August 1996 and ending no earlier than January 1997. Appropriate actions will be taken based on the results of these surveillances.
6. We will conduct previously planned audits of the corrective action process to monitor effectiveness of corrective action process improvements in October 1996.

Schedule for Completion and Responsible Positions

Action 1 is the responsibility of the Quality Assurance Supervisor. Actions 2 and 3 are the responsibility of the PORTS and PGDP Commitment Management Managers. Completion of Action 4(a) is the responsibility of the MAAT at PGDP and the CARB at PORTS. Completion of Action 4(b) is the responsibility of the functional managers responsible for the affected corrective action plans. Completion of Actions 5 and 6 will be the responsibility of the SS&Q Managers at both sites. Completion dates for all tasks are as noted above.

2.3 Maintenance of and Adherence to Authorization Basis

Goal

The goal of management controls pertaining to the authorization basis is to ensure the basis for the safety of GDP operations and any changes to that basis are captured, maintained, and applied to ensure adherence to the authorization basis at all times.

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Status

Two major concerns were presented by DOE during the May 9, 1996 meeting. These related to management controls for ensuring plant operation within the authorization basis and management response when operations are determined to be outside the authorization basis. Other concerns expressed included the awareness of plant personnel concerning the requirements of justifications for continued operations (JCOs) and associated compensatory measures which may be in effect. The JCOs and other forms of regulatory enforcement discretion are recognized as temporary extensions of the authorization basis of which plant personnel should be aware.

Additionally a question was raised as to whether the plants were taking prompt and conservative actions to return to within the safety basis envelope once significant issues are identified. DOE also discussed the need for prompt evaluation of identified conditions commensurate with their inherent safety significance. Additional observations reviewed were documented in DOE inspection reports and NRC observation reports and obtained through discussions with various plant personnel. DOE concluded that the current management systems in place at the plants do not provide the required controls to ensure adherence to the authorization basis is consistently obtained and maintained. During the May 9, 1996, management conference, USEC discussed certain actions taken addressing the aforementioned concerns.

Compliance with the Authorization Basis

With regard to compliance, the focus over the last 18 months has been on strict compliance with authorization basis requirements. Results in this area were evidenced by a comparison of the number of reported Operational Safety Requirement (OSR) violations in 1995 as compared to those from the previous year (for Portsmouth, 33 in 1995 versus 2 in 1994; for Paducah, 13 in 1995 versus 4 in 1994). These numbers are also indicative of the willingness to self-identify and report violations. Trends in this area are communicated in monthly regulatory performance indicator reports. Positive reinforcement and disciplinary actions have been taken as appropriate to support management expectations in this area of OSR compliance as well as adherence to procedures. Overall, compliance has improved.

DOE "Tiger Team" inspections at Portsmouth and Paducah in the 1989-1991 time frame recognized and reported the need to revise the OSRs to improve overall compliance. This observation was also noted during a Martin Marietta Corporate Audit during the same period. Efforts were undertaken at that time to revise the OSRs to the TSR format. These efforts were completed at PGDP and partially implemented at PORTS. The remainder of the OSR upgrades at PORTS were suspended due to the proximity of the planned OSR to TSR transition.

FSAR Maintenance

The subject of FSAR maintenance falls into two distinct areas. The first involves ongoing maintenance of the FSAR and the second concerns changes to the FSAR identified in the preparation of the SAR submitted to the NRC.

At the time the GDPs came under the purview of the ROA, the approved FSARs were known to contain some discrepancies. Technical bases information was to be included as part of the Safety Analysis Upgrade and provisions were included in the ROA for dispositioning as-found discrepancies to facilitate maintenance of the safety basis.

Dispositioning of As-Found Conditions

Although there are some provisions in the ROA for carrying out these activities, deficiencies exist in the procedural infrastructure necessary to ensure timely and effective implementation. Specifically, interfaces are weak between the Problem Reporting system and Safety Analysis procedures necessary to implement appropriate actions for as-found conditions and sufficient procedural guidance is not available to ensure consistent interpretation and execution of the requirements. Compliance in this area is not at an acceptable level.

A special category of as-found conditions was identified as part of the preparation efforts for the SAR submitted as part of the NRC Certification Application. These conditions were identified through a comparison of the FSAR and SAR to identify changes. These changes were made to improve the accuracy of the information contained therein. During August 1995, both plants submitted problem reports to identify the changes. An action plan and schedule for dispositioning all of the changes identified was to be developed, in accordance with plant procedures.

Due to lack of progress on this issue at PORTS, DOE issued an Order to Take Action to expedite the activity. The response to that order provides a summary of items identified and the plans for dispositioning those items.

With regard to the handling of JCOs not associated with the Compliance Plan and the corresponding compensatory actions and required action dates, a summary of the information for all active JCOs is currently included on the Plant Shift Activities Report. The C-300 and X-300 facilities also retain complete copies of active JCOs (except those in the Compliance Plan). Required actions are tracked in the Business Prioritization System (BPS) at each plant and are included and statused in the Nuclear Regulatory Assurance and Policy Plan at USEC headquarters. These efforts, as well as additional emphasis on verification of compensatory

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actions, are expected to improve overall compliance in this area and raise confidence in the assurance that management expectations will be met.

Actions Planned

1. To address deficiencies in the procedural infrastructure associated with the identification and dispositioning of as-found conditions, a review of the existing procedures will be conducted to develop appropriate changes. This review will be completed by September 30, 1996.
2. Upon completion of the required changes, personnel responsible for dispositioning and reviewing as-found items will receive training to reinforce management expectations regarding these requirements. The procedure revisions and associated training will be completed by September 30, 1996.
3. The as-found conditions identified through the SAR preparation will be dispositioned as described in the response to the DOE Order for Action at PORTS and per the existing schedule established in the Problem Report at PGDP (therefore Action 3 is not a new regulatory commitment).
4. Specific indicators to monitor compliance and performance trends will be developed by July 31, 1996. Using those indicators, compliance with the authorization basis will be monitored on an ongoing basis and appropriate recommendations provided for potential performance improvements.

Schedule for Completion and Responsible Positions

Completion of Planned Actions 1 and 4 is the responsibility of the USEC NRAP Manager. Completion dates for actions 1 and 4 are as noted above.

The NRA Managers at each of the respective facilities will be responsible for Planned Action 2. Action 2 will be completed on the schedule presented above. Action 3 will be completed as described in the response to the DOE Order for Action.

3.0 ASSESSMENT OF OTHER MANAGEMENT CONTROLS

In addition to the three areas highlighted by DOE, USEC relies on other management controls. Our goal, assessment of status and actions planned are discussed for each.

3.1 Performance Measures

Performance measures are used to objectively indicate individual plant performance, a comparison of PGDP to PORTS performance, and performance relative to the nuclear industry. One type of performance measure is the comprehensive set of performance indicators used to provide objective data on GDP performance. Because the gaseous diffusion plants are unique within the domestic nuclear industry, it is difficult to find direct comparison indicators with other nuclear industry facilities. However, the fundamental areas of interest to management of the GDPs are very similar to those of interest to management of other nuclear facilities, and the focus on attaining high nuclear safety culture standards is the same. Another performance measure is provided by the Plant Performance Review Committee (PPRC). The PPRC is staffed with senior industry experts to help the corporation gauge the performance of the plants against the nuclear safety culture standards. A third type of performance measure is the Operating Experience Review Program (OERP). The OERP is intended to assure that we remain aware of relevant experience at plants from which the GDPs may learn and prevent similar problems from occurring at the GDPs. These performance measures are further discussed below.

3.1.1 Performance Indicators

Goal

Performance Indicators (PIs) shall: 1) reflect the key concerns of management, 2) be clearly defined, consistently measured, and readily understood, 3) clearly reflect the performance of those responsible for the area measured and respond to changes in performance, 4) be amenable to setting goals, and 5) reflect a broad enough range of issues to monitor the overall health of the organization. Performance indicators are to be used at various levels of management throughout the plants and a single executive level PI set will be used by senior managers (Vice President and above, and General Managers) as a tool to assess performance and enhance management control.

Status

USEC has an extensive system of PIs to measure performance and progress. The Executive PIs have evolved over a two and a-half year period from a set with little focus on nuclear safety and operations to an "in-process" set with strong focus toward nuclear safety and

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nuclear oversight. Other PIs used in functional groups throughout the plant have received similar scrutiny aimed at ensuring meaningful indicators exist. This continuous improvement process for PIs began on May 16, 1994, when USEC committed to DOE to a weekly review of performance indicators relating to events and nonconformances having root causes involving procedure problems and personnel errors. Subsequently, procedure related problems and personnel errors were trended, reviewed, and analyzed weekly. Personnel and procedural error performance indicators were added to the monthly USEC Executive Report in May 1994.

In mid-1994 a joint USEC/LMUS team was formed to review the significance and usefulness of data provided in the monthly Executive Report. The end result of that effort was a streamlined PI Report that replaced the old monthly Executive Report. The new report contained alarm actuations, preventive and corrective maintenance backlogs, personnel skin contaminations, personnel radiation exposure and ROA-related violations in addition to the previously added personnel and procedural error indicators. These additional performance indicators were added to focus more on conduct of operations and maintenance.

During 1995 and into 1996, we have continued to improve the monthly PI Report with further breakdown of maintenance backlogs and more consistent definitions of the parameters being trended. With the establishment of the PPRC (discussed below), the PIs were independently viewed from an objective standpoint as to their usefulness and consistency between plants. In addition, the QOOP was undergoing its first review and the PPRC perceptively recognized the need for better, more meaningful performance indicators relative to the individual QOOP initiatives.

The PPRC concluded that the number of indicators was too large and diminished focus on the more important indicators. To address this issue, a QOOP initiative was established to develop a performance indicator system that better achieved the goal for an effective PI system. The owners of this initiative are jointly the USEC Vice President, Production; the Plant General Managers; and the President, LMUS. To assist in this effort, a consultant experienced in commercial nuclear plants was tasked to review the current set of performance indicators and compare them with those common to the commercial nuclear industry and the chemical process industry. His report has been received and a final executive level PI working session was conducted on June 4, 1996 to finalize the executive level performance indicators.

The Executive Working Group included the Vice President, Production; President, LMUS; Plant General Managers; USEC and LMUS Nuclear Regulatory Affairs Managers; and key support staff. Consideration was given to current PIs, the consultant's report and benchmarking of nuclear utility PIs conducted by the General Managers. Because the benchmarking had shown a great consistency of focus areas between utilities, a template set of PIs from one utility was chosen as a guide for the group session.

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The Executive Working Group established an executive level set of PIs in the following categories: Nuclear Safety, Nuclear Oversight, Industrial Safety, Environmental Performance, Plant Performance and Reliability, Economic Performance, and Professionalism.

The final product will provide a more focused set of performance indicators so that management can better judge performance and progress in the most important areas of plant safety and operations; and can use the indicators for early warning of a developing problem or adverse trend.

USEC is also using several performance indicators as the basis for a revised O&M incentive plan for LMUS which has a major focus on nuclear safety, including: safety system actuations, safety system failures, UF₆ releases, OSR/TSR violations, NOVs, personnel errors (including improper work practices, inadequate communications, inattention to detail, and failure to follow procedures), effectiveness of the corrective action program, OSR/TSR transition execution, and meeting Priority One commitments (i.e., regulatory commitments that specify tasks and their completion dates). This new incentive plan was put in place on May 31, 1996.

Actions Planned

1. USEC will implement the new upgraded executive level performance indicators described above in August 1996.
2. USEC will perform a self-assessment of the effectiveness of the executive level PIs in meeting the expectations of the goal for PIs in January 1997.

Schedule for Completion and Responsible Positions

Completion of Planned Actions 1 and 2 will be the responsibility of the Vice-President, Production. Completion dates for Actions 1 and 2 are as noted above.

3.1.2 Operating Experience Review Program

Goal

The Operating Experience Review Program (OERP) ensures that an effective review of both in-house and related industry experience occurs in a planned, timely, and controlled manner. The process provides tracking and trending mechanisms to identify recurring or similar events. This information is used for implementing improvements in equipment, processes, procedures, and training in order to prevent occurrence of events at the GDPs.

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Status

The OERP is being developed in accordance with a QOOP initiative. The OERP involves two elements: a Corporate element, responsible for keeping the plants aware of external industry experience, and a GDP element, responsible for keeping the plants aware of internal GDP experience.

USEC administers the Corporate element of the program according to a procedure which became effective on May 29, 1996. The scope of the procedure includes a review of generic communications from the NRC, DOE, Lockheed Martin Corporation, and vendors. The review is conducted by the NRAP organization and involves screening the external operating experience for potential applicability to the GDPs. Issues suspected of being applicable are forwarded to the appropriate OERP Administrator at the GDPs for review and dissemination. NRAP maintains a log tracking each external issue through closure.

The GDP element of the program is administered according to a procedure which became effective on February 16, 1996. The scope of the procedure includes a review of in-house events, problem reports, and non-conformance and material deficiency reports from suppliers; lessons learned at the other GDP; and lessons learned in the industry. The review involves screening the operating experience for potential applicability to the GDPs. Those issues suspected of being applicable are forwarded to the appropriate organizational managers for evaluation and resolution. If actions are deemed necessary a Problem Report is initiated. A log tracking each internal issue through closure is maintained.

Actions Planned

There are no specific actions planned. Both procedures are in place and the OERP is active.

3.1.3 Plant Performance Review Committee

Goal

The Plant Performance Review Committees (PPRCs) were established to gauge GDP performance against regulatory requirements, industry standards, and the corporate strategic plan at both plants; provide independent reviews and assessments; sponsor and evaluate audits; and report findings and/or concerns to executive/line management.

Status

The PPRCs were established in early 1995. The Committees, reporting to the Executive Vice President Operations, provide independent reviews of activities on matters related to nuclear safety, regulatory compliance, plant performance, and business operations. Each PPRC is made up of core members, which sit on both Committees, a representative from each GDP, and a representative from the local technical community. The core members consist of individuals with extensive operational management and oversight experience in the commercial nuclear industry. Currently the core members include a retired utility executive, a retired fuel cycle facility executive, and two retired NRC executives (from NRR and NMSS). The PPRCs currently meet every other month at the GDPs (both have met at least six times) and the core members meet periodically at USEC Headquarters. Typically, the PPRC reviews the following areas at each meeting: significant plant events, Plant Operations Review Committee (PORC) activity (including safety evaluations), SS&Q organization activity (audits/surveillances), significant Unreviewed Safety Question Determinations, and OSR/TSR development. Additionally, the Committee looks in-depth at a different functional area at each meeting and conducts in-plant assessments of areas of interest, or at the request of the USEC or GDP senior management. Areas reviewed to date by the PPRC are listed below.

PPRC In-Plant Assessments¹

PGDP

QOOP (2)
Nuclear Criticality Safety (1)
Training and Procedures (2)
Assay Upgrade (1)
Work Control (2)
CUP (1)
Engineering (1)
Configuration Management (2)
Maintenance (2)
Technical Services (1)
QA (1)
NRC Interface (1)
Nuclear Criticality Analysis Flowdown (1)
Work Packages (1)
10 CFR 76.68 (1)
Radiation Protection Control (1)
Employee Concerns/Ethics Program (1)

PORTS

Human Resources (1)
Health and Safety (1)
Training and Procedures (1)
HEU Suspension (1)
HEU Refeed (2)
CUP (1)
Engineering/Configuration Management (1)
Chemical Decon. Facility (1)
Maintenance (2)
DOE/USEC Interface (1)
QA (1)
Regulatory Affairs (1)
Cascades (1)
PORC (1)
Safety Analysis (1)
Radiation Safety (1)

¹number in parentheses indicates the number of times area was visited

PPRC Functional Area Reviews

PGDP

Cascade Operations
Maintenance
Engineering
TSRs
Corrective Action Process
Radiation Safety Program

PORTS

Plant Operations
Maintenance
Engineering
TSRs
Corrective Action Process

Actions Planned

None. The PPRC is functional and responsive to the goal.

3.2 Audits, Assessments, and Evaluations

USEC performs activities that enable reliable self-identification of performance problems and noncompliances. These activities include audits of compliance, surveillances, assessments and engineering evaluations. The goal, status and actions planned for each are described below.

3.2.1 Audits

Goal

USEC is moving towards an audit system that includes planned and periodic audits, executed in accordance with procedures and performed by qualified personnel having no direct responsibilities in the areas being audited, as described in USEC's Quality Assurance Program in the NRC Certification Application. This system should assure that USEC management is aware of compliance, efficiency or implementation concerns or negative trends.

Status

USEC now relies on the Safety, Safeguards and Quality organization (established in December 1995) to perform periodic audits to verify compliance with regulatory requirements and management controls, and to assess effectiveness of the areas audited. Trained and qualified auditors perform the audits supplemented by technical specialists with expertise in the area being audited. Usually the technical specialists are from the other GDP, headquarters, contractors, or a combination from those sources. Using personnel with varied backgrounds and expertise contributes to the success of the audit program.

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In April 1995 USEC changed the audit program to include performance-based audit techniques. Comprehensive audits include mandated DOE ROA requirements, progress toward NRC readiness, and program effectiveness. Audit results have surfaced significant issues such as the recent corrective action effectiveness audit at the Portsmouth plant. USEC performs high quality audits focused on surfacing significant quality issues. Each year audits are performed against each of the 19 operational requirements of the ROA. As currently implemented, this audit system is providing reliable indications of the status of compliance with ROA requirements and plant performance.

Actions Planned

1. USEC plans to transition from the DOE POA required audit program to that described in the NRC Certification Application during the next 3 months. A request to support this transition will be sent to DOE by June 30, 1996.
2. Assuming DOE concurrence, we will transition to the new audit program by September 1, 1996. This transition will permit an improvement in audit coverage by removing the strict audit scope requirements imposed by the DOE ROA and in audit quality by reducing the required number of major audits to be conducted annually.

Schedule for Completion and Responsible Positions

Responsibility for completion of Planned Actions 1 and 2 belongs to the Quality Assurance Supervisor at USEC Headquarters. The schedule for completing these actions is as noted above.

3.2.2 Surveillance

Goal

The goal in this area is an ability to perform surveillances on a frequency responsive to USEC management requests. Surveillances are smaller in scope, duration, and resource intensity than audits and can be performed relatively quickly. USEC performs surveillances to obtain a responsive assessment of performance and/or compliance in a desired area on an as needed basis.

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Status

In Fiscal Year 1996 USEC increased its quality assurance surveillance effort as addressed by a QOOP initiative. Surveillances provide value-added input. Management routinely requests surveillance of areas with perceived problems and areas of special interest. Surveillances focus on a more narrow scope than audits and are performed relatively quickly. Because of the nature of surveillances, problems are surfaced and brought to management's attention much sooner, often in real time. Over 70 surveillances have been performed at each plant during Fiscal Year 1996 to date.

Actions Planned

None. The surveillance effort is functional and responsive to the goal.

3.2.3 Self-Assessment

Goal

The goal in this area is to instill and reinforce a culture of self-assessment that leads to continuous improvement and achievement of ever increasing standards of quality and performance.

Status

A self-assessment process has been functioning at Paducah for over a year. The process is ongoing and no further action is needed.

Additional guidance on organizational (i.e., departmental) self-assessment is currently being developed in accordance with a QOOP initiative. The Quality Assurance Supervisor completed a self-assessment white paper providing guidance to plant personnel. This paper was sent to both GDPs for distribution prior to the corrective action meeting on June 3, 1996.

Actions Planned

1. The Quality Assurance Supervisor will conduct a self-assessment presentation at both plants by June 30, 1996.

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2. The Safety, Safeguards and Quality Manager at Portsmouth will ensure completion of an organizational self-assessment procedure by June 30, 1996 and implementation by September 30, 1996.
3. The PORTS SS&Q Manager will perform an assessment of organizational self-assessment implementation by December 31, 1996 and a follow-up assessment by April 30, 1997, as part of the scheduled audits of corrective action.

Schedule for Completion and Responsible Positions

Responsibilities for completion of Planned Actions 1, 2, and 3 and schedule requirements are as described above.

3.2.4 Engineering Evaluations

Goal

A nuclear safety assessment function will be established and staffed, reporting to the SS&Q Manager at each GDP. The nuclear safety assessment function will examine plant operating characteristics, event reports, problem reports and other sources of design and operating experience information and perform investigations which may indicate areas for improving plant safety.

Status

In a presentation to the NRC on June 20, 1995, regarding USEC site presence, we described the function, scope and makeup of the new SS&Q organizations to be established at each GDP. The nuclear safety assessment function was added as part of the new SS&Q organization. USEC authorized a staff of two engineers at each plant, but has had difficulty hiring qualified engineers to fill the authorized positions. At present, USEC has succeeded in filling one open position at each plant, leaving one open at Portsmouth and Paducah. The nuclear safety assessment function is, therefore, not yet fully staffed. USEC is placing advertisements in nuclear industry publications to help identify qualified individuals to fill the two open positions.

Action Planned

1. Until the open positions can be filled with permanent employees, USEC will fill them with contract individuals starting on July 15, 1996.

Schedule for Completion and Responsible Organization

Responsibility for completing Action 1 above belongs to the SS&Q Managers at each plant. The date for completion of Action 1 is as shown above.

3.3 Interdisciplinary Line Management Reviews

This section describes the Plant Operations Review Committee (PORC).

Goal

The purpose of the PORC is to function as a key component of the oversight program referenced in 10CFR76.35(a)(7) and the review process mentioned in ROA Section 3.2. This function is to ensure that activities directly relevant to nuclear safety are conducted in an appropriately controlled manner that ensures protection of employee and public health and safety. To meet this objective the PORC: (a) Advises the General Manager whether activities affecting nuclear safety are safe and within the authorization/certification basis for the plant; and (b) Ensures safe operations consistent with (depending on current applicability) the ROA, FSAR/SAR, OSR/TSR, and Certificate of Compliance and Compliance Plan.

Status

The PORCs were established in March 1995, and operational at the GDPs by October 2, 1995. Since that time, several actions have enhanced the overall effectiveness of the committees. The PORCs were modeled after the Safety Review Committee specified in the Westinghouse Standard Technical Specifications, PORC procedures from reactor facilities, and benchmarking trips to commercial nuclear reactor facilities. The PORCs at both GDPs are governed by a common procedure.

As the PORCs have matured, deficiencies in their operations have been identified and several actions have been completed to resolve these deficiencies. Continuous self assessment and peer review are ongoing. Actions taken to improve PORC performance include the following:

- Training PORC members on management expectations of PORC, FSAR, OSR, Nuclear Criticality Safety Assessments (NCSAs), TSRs, SAR, and other safety programs.

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- Coaching PORC Chair and members by coaches with extensive experience in other rigorous nuclear safety environments.
- Adding members to the PORC with commercial or navy nuclear experience as well as previous PORC experience at other nuclear facilities.
- Requesting periodic monitoring of the PORC by the PPRC.
- Benchmarking commercial nuclear facilities.

PORC members are required to have a bachelors degree in engineering or a physical science, or equivalent technical experience. In addition, PORC members must have four years of nuclear experience with a minimum of six months experience in a gaseous diffusion plant. A quorum consists of the chairman plus six members which includes no more than two alternates. The quorum is made up of members with the technical competence to provide review for one or more of the following core areas:

- | | |
|--|-----------------------|
| • Operations | • Quality Assurance |
| • Engineering | • Radiological Safety |
| • Nuclear Criticality Safety Engineering | |

PORC meetings are normally scheduled in advance. Normally agenda items are prepared and distributed to PORC members prior to the meeting in order to allow adequate time for review. An exception is the provision to allow "walk-ins" at the PORC Chairman's discretion. Minutes of PORC meetings are prepared and distributed to the DOE Site Safety Representatives, NRC Resident Inspector, the PPRC, PORC members, selected members of USEC and plant management, and the General Manager at each enrichment site.

The PORCs' effectiveness continues to improve as members gain experience. The PORCs will continue to mature by utilizing the expertise of experienced PORC members, mentoring from experienced coaches, oversight from the PPRC, feedback from DOE and NRC inspection reports, and continuous self-assessment and peer review.

Actions Planned

No specific additional actions are planned.

3.4 Organization, Selection, and Training of Personnel

Goal

USEC desires an organization with clear lines of authority and responsibilities. The organizations must be efficient and staffed with qualified individuals having both gaseous diffusion and other appropriate nuclear safety experience.

Status

During the last two years, USEC has improved the organizational structure at the two GDPs and upgraded the processes for the selection, training and qualification of personnel. These improvements have been driven by the recognition that personnel qualifications and training must comply with requirements in 10 CFR 76.35(a) after Certification. USEC also understands the regulators' expectation that personnel will perform with a high sense of responsibility and accountability supporting the rigor and discipline needed in nuclear industry operations.

Although some changes to the organization as a whole, for streamlining purposes, were accomplished early in USEC's life, the basic structure of the individual plant organization was generally unaffected. In 1995 it became clear that fragmentation of functions, unclear lines of authority and responsibility and excessive layering existed and these warranted a full GDP organizational review. USEC employed a consulting firm experienced in conducting organizational services for facilities in the nuclear industry and regulated by the NRC. The organizational review was conducted in the summer and early fall of 1995. The result was a recommendation to reorganize the plants to a functional organization, with centralization of functions and clear lines of authority and responsibilities. USEC carefully considered this recommendation with concern for the impact on such events as certification and the many improvement efforts underway that could be affected by numerous personnel changes.

The decision was made to reorganize because the many advantages outweighed the impact concerns, and both GDPs were reorganized in late 1995 through early 1996. Specific objectives that were accomplished with the reorganization include: (a) reduced fragmentation of functions such as maintenance and engineering, (b) creation of a central work control organization, (c) reduction in the number of individuals reporting to the General Manager from over 20 to about 10, (d) elimination of deputy and assistant manager type positions, clarifying accountability and responsibility, and (e) increases in USEC management control with the establishment of the Safety, Safeguards and Quality Organization and a clear reporting line from the General Manager to the Vice President, Production.

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The reduced number of direct reports and establishment of an Enrichment Plant Manager position responsible to the General Manager for all production have allowed the General Manager to step back and take a broader view of the nuclear safety issues and other plant performance concerns.

USEC and LMUS took the opportunity afforded by the reorganizations to carefully review management assignments. A transition team for each GDP made up of selected senior managers and a USEC headquarters manager, using specific criteria and grading system, assessed each individual for the specific position he or she would fill. Where personnel have been hired, care has been exercised to find appropriately experienced personnel rather than simply "fill a hole."

USEC brought in eight coaches at each plant starting in December 1994. The coaches are senior consultants with relevant experience in a rigorous nuclear safety culture. The coaches have made significant contributions to guiding and influencing managers and other personnel toward a safety culture consistent with nuclear industry standards.

To improve organizational effectiveness and engineering response to safety and operational issues, USEC established a system engineer program which is in place and functioning.

In summary, we have an organization structure in place which has clear lines of authority and responsibilities (now being flowed down into policies and procedures). It provides the framework within which strong, experienced personnel can be assigned, trained and qualified. We have made progress but recognize that effective selection, training and qualification of personnel is an on-going continuous process.

USEC has additional ongoing actions aimed at choosing the right people and enabling them to excel in their work under the most rigorous requirements. For example:

Actions Planned

1. USEC is establishing effective manager selection, development and succession planning programs. This process is identifying key manager positions, developing succession plans, identifying cross-training needs, and monitoring candidate development.
2. USEC has an extensive project ongoing to ensure a performance-based training program meeting the requirements of 10 CFR 76 is in place and employees are

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appropriately trained. This effort is included in our QOOP and is covered by specific completion dates in the Compliance Plan.

3. Because of the differences between OSR and TSR specific requirements, an OSR-to-TSR Transition Plan has been developed which includes training of employees on the new and revised TSRs. The schedule for completing specific training is being finalized subject to final TSR approvals, but will reflect training completion before operating under the TSRs.
4. In addition to the project mentioned in item 2 above, an additional QOOP initiative addresses efforts to upgrade the effectiveness of GDP training programs overall. This includes, for example, professional development needs for groups such as engineers and maintenance of an active drill program.
5. USEC plans to have an external assessment conducted within the next six months to verify the effectiveness of the reorganization in meeting expectations.

Schedules for Completion and Responsible Organizations

Responsibility for completion of Planned Action 1 belongs to the Human Resources Managers at the sites. This action will be completed by August 15, 1996.

Responsibility for Planned Action 2 belongs to the Procedures and Training Managers at PORTS and PGDP. The schedule for completion is as specified in the Compliance Plan.

Responsibility for Planned Action 3 belongs to the Procedures and Training Managers at PORTS and PGDP and this action will be completed by November 30, 1996.

Responsibility for Planned Action 4 belongs to the Procedures and Training Managers at PORTS and PGDP. This action will be completed by October 31, 1996.

Responsibility for Action 5 belongs to the USEC Production Support Manager. This action will be complete by December 31, 1996.

3.5 Employee Concerns

Goal

USEC seeks to ensure that personnel feel free to raise safety concerns and have confidence that the concerns will be addressed without fear of retribution.

Status

The employee concerns process is being developed in a manner which assures that employees have a mechanism to raise safety concerns, without possible or perceived retribution and that assures that management is aware of employee's concerns, and that these concerns receive appropriate attention.

A procedure implementing our employee concerns process has been drafted. This procedure applies to all employees. In February 1995, employees concerns managers were appointed at both plants. Postings were made throughout each plant advising employees of the existence of the process, the name of the employee concerns contact and how to raise a concern. The employee concerns process has been informally implemented (i.e. without a formal procedure) since April 1995 at both plants.

Action Planned

1. The employee concerns process is largely in place. It will be fully implemented when the procedure is made effective. The procedure will be completed by September 1, 1996.

Schedule for Completion and Responsible Organization

Planned Action 1 is the responsibility of the Employee Concerns Managers at PORTS and PGDP and will be completed on the schedule described above.

3.6 Reporting and Communication

Goal

The reporting and communications network establishes the necessary framework to ensure that USEC management maintains an awareness of significant issues and the status of

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commitments made to regulatory agencies so that prompt and appropriate attention is given to issues before adverse consequences occur.

Status

This area is comprised of the various formal and informal communications vehicles necessary to exercise control and ensure continuity of day-to-day operations throughout the USEC uranium enrichment enterprise. Instructions, guidance, and directives are established through formal policies and procedures and other forms of verbal and written communications.

This category includes, but is not limited to, the following established systems summarized below.

Morning Call: The morning conference call occurs each working day and involves the Production Support Manager and the Enrichment Plant Managers from the respective plants. Among the topics discussed during this call are a summary of problem reports from the previous reporting period, a discussion of reportable events, and other significant issues affecting the plants or the Corporation.

Weekly Regulatory Call: This weekly conference call is chaired by the Nuclear Regulatory Assurance and Policy Manager and attended by the Nuclear Regulatory Affairs staffs at each plant and members of the NRAP headquarters organization. The call covers a wide range of topics of regulatory interest which include significant issues and events and the status of regulatory commitments.

A high priority has been placed on the completion of regulatory commitments before established due dates. Written notification is required for changes in commitments and extensions for committed dates which cannot be satisfied. Performance in this area is included in a monthly Regulatory Performance Indicator Report prepared by the respective NRA staffs.

We have allocated sufficient resources to operate the plants safely and to meet our ROA requirements while preparing for NRC regulation. Furthermore, to facilitate assurance of timely completion for regulatory commitments both plants are developing program management plans (referred to as the integrated analysis of resource loading in Section 1.1 above) as a tool for effective resource allocation. This will enhance the ability to provide confidence for USEC and its regulatory oversight agencies in our ability to accomplish committed actions in accordance with mutually agreed schedules.

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Periodic Reports: The Safety, Safeguards and Quality Managers provide independent, bi-weekly status reports to the Executive Vice President-Operations. These reports include candid observations of significant issues and concerns identified at the plants by their staffs.

Actions Planned

1. The NRAP Manager will evaluate the existing communications and reporting systems for potential improvements in the area of awareness of regulatory issues and plans. This review will be completed by August 31, 1996.
2. By June 30, 1996, each GDP will complete a program management plan which resource loads regulatory commitments. Completion of these plans is the responsibility of the designated program managers reporting to the General Managers at each GDP.

Schedule for Completion and Responsible Organization

Planned Action 1 is the responsibility of the NRAP Manager. Action 2 is the responsibility of the designated program managers reporting to the General Managers at each GDP. These actions will be completed on the schedules mentioned above.

Enclosure 3

Commitments to DOE

Following are the commitments to DOE made in this letter. These commitments were taken from Enclosure 1, which summarizes the Planned Actions listed in Sections 2.1 through 2.3 of Enclosure 2. Planned Actions listed in Sections 3.1 through 3.6 of Enclosure 2 are considered voluntary enhancements.

2.1 Procedure Adequacy and Use

1. A procedure has been approved for the process of identifying regulatory commitments and ensuring that they are appropriately incorporated into policies and procedures. Because of the large number of commitments in the application a special process, based on the procedure, has been developed. This process is documented and started on June 7, 1996.
2. USEC will complete the upgrade of site procedures as defined in the Procedures Upgrade Program consistent with the schedule shown in the Compliance Plan.
3. As indicated in the Compliance Plans, organizational roles and responsibilities provided in Section 6.1 of the Application will be flowed-down to committed position descriptions and position descriptions will be reviewed and revised, if necessary, with the completion of the procedures upgrade effort.
4. In the near term, USEC is taking the following steps to improve procedure quality and adherence:
 - a. Providing training to hourly operations and maintenance personnel on procedure use and adherence.
 - b. Providing training on procedure use, development, and control to managers and other plant professionals involved in the procedure process.
 - c. During the flowdown of TSRs (part of the overall flowdown effort mentioned above), reevaluating procedures for the proper use category.
 - d. Reviewing the technical adequacy of all procedures past their periodic review dates.

These near-term actions will be completed by December 31, 1996.

5. USEC will revise the QOOP initiative on conduct of operations by July 15, 1996.

Schedule for Completion and Responsible Positions

The Nuclear Regulatory Affairs Managers at each site are responsible for Action 1. Actions 2 and 4 are the responsibility of the Procedures Upgrade Project Manager. Action 3 is the responsibility of the Vice President of Production. The USEC Production Support Manager is responsible for Action 5. Completion dates are as noted above.

2.2 Corrective Actions

Actions Planned

1. We will revise and, where feasible, consolidate the existing procedures that constitute the corrective action process to provide clear direction, accountability and responsibilities, and establish clear procedure interfaces. Procedure revisions will be completed and implemented by August 31, 1996.
2. Selected managers and selected other individuals will be trained in root cause analysis and corrective action plan development by September 30, 1996.
3. Corrective action performance indicators will be developed and provided to management starting in August 1996.
4. (a) The MAAT at PGDP and the CARB at PORTS will perform a review of open SCAQ corrective action plans against the revised SCAQ criteria. This review will be performed following a review of the open corrective action plans to the revised SCAQ criteria and will be completed by September 30, 1996.

(b) Corrective action plans found in the aforementioned review to need improvement will be revised by the functional managers responsible for those corrective action plans. The corrective action plans will be revised as necessary by September 30, 1996.
5. We will conduct monthly surveillance of selected corrective actions to monitor improvements in effectiveness starting in August 1996 and ending no earlier than January 1997. Appropriate actions will be taken based on the results of these surveillances.
6. We will conduct previously planned audit^o of the corrective action process to monitor effectiveness of corrective action process improvements in October 1996.

Enclosure 3
Commitments to DOE
June 14, 1996

Schedule for Completion and Responsible Positions

Action 1 is the responsibility of the Quality Assurance Supervisor. Actions 2 and 3 are the responsibility of the PORTS and PGDP Commitment Management Managers. Completion of Action 4(a) is the responsibility of the MAAT at PGDP and the CARB at PORTS. Completion of Action 4(b) is the responsibility of the functional managers responsible for the affected corrective action plans. Completion of Actions 5 and 6 will be the responsibility of the SS&Q Managers at both sites. Completion dates for all tasks are as noted above.

2.3 Maintenance of and Adherence to Authorization Basis

Actions Planned

1. To address deficiencies in the procedural infrastructure associated with the identification and dispositioning of as-found conditions, a review of the existing procedures will be conducted to develop appropriate changes. This review will be completed by September 30, 1996.
2. Upon completion of the required changes, personnel responsible for dispositioning and reviewing as-found items will receive training to reinforce management expectations regarding these requirements. The procedure revisions and associated training will be completed by September 30, 1996.
3. The as-found conditions identified through the SAR preparation will be dispositioned as described in the response to the DOE Order for Action at PORTS and per the existing schedule established in the Problem Report at PGDP (therefore Action 3 is not a new regulatory commitment).
4. Specific indicators to monitor compliance and performance trends will be developed by July 31, 1996. Using those indicators, compliance with the authorization basis will be monitored on an ongoing basis and appropriate recommendations provided for potential performance improvements.

Schedule for Completion and Responsible Positions

Completion of Planned Actions 1 and 4 is the responsibility of the USEC NRAP Manager. Completion dates for actions 1 and 4 are as noted above.

Enclosure 3
Commitments to DOE
June 14, 1996

The NRA Managers at each of the respective facilities will be responsible for Planned Action 2. Action 2 will be completed on the schedule presented above. Action 3 will be completed as described in the response to the DOE Order for Action.

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PGDP CASCADE OPERATIONS C-304

PAGE 2
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08/14 '98 16:13

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ID:NRA

FAX: 5024416798

PAGE 1

FROM : USMC

3001 = 3000 + 1 = 3001

Abstract:

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RT33 P. 129/64

UNEC NUCLEAR REGULATORY CORRESPONDENCE

PLEASE ACT PROMPTLY

Document: USEC DOE Management Conference Letter

Due to Regulator: June 14, 1989

Сопутствующие:

Preparation:

J. Syder

date _____

R. Woolley:

date

Legal:

N/A

date

Plant Manager

(M. Allen S. Polytan)

date

NRA Manager:

(A. Garton D. Byam)

Date _____

J. Miller:

date

For conversion
file.
JS

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REGULATORY CORRESPONDENCE REVIEW AND APPROVAL

Summary (Log #, Title, Subject):

Response to DOE letters

Letter/Report No.:
(Serial or Event)

Dated April 25, 1996 and May 30, 1996

Preparer:

Rob Woolley / Jim Sider

Due Date:

6/14/96

Closed Commitments (List BPS #'s):

Review and Approval	Signature/Date	Area of Review*	Comments	
			Yes	No
<input type="checkbox"/> Enrichment Plant Manager				
<input type="checkbox"/> Administrative Support Manager				
<input type="checkbox"/> Customer Service & Product Scheduling Manager				
<input type="checkbox"/> Engineering Manager				
<input type="checkbox"/> Maintenance Manager				
<input type="checkbox"/> Operations Manager				
<input type="checkbox"/> Plant Shift Superintendents Manager				
<input type="checkbox"/> Production Support Manager				
<input type="checkbox"/> Work Control Manager				
<input type="checkbox"/> Safety, Safeguards, and Quality Manager				
<input type="checkbox"/> Environmental, Safety and Health Manager				
<input type="checkbox"/> Site and Facilities Support Manager				
<input type="checkbox"/> Training & Procedures Manager				
<input type="checkbox"/> Materials Manager				
<input type="checkbox"/> Legal Counsel				
<input type="checkbox"/> Peducan				
<input type="checkbox"/>				
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<input type="checkbox"/>				
<input type="checkbox"/>				
<input checked="" type="checkbox"/> Nuclear Regulatory Affairs Manager	<i>[Signature]</i>			X
<input checked="" type="checkbox"/> General Manager	<i>[Signature]</i>			X

* LEFT MARGIN SIDEBARS INDICATE AREAS OF ORGANIZATIONAL REVIEW RESPONSIBILITIES.

☒ Organization supplied input, information verification required.☐ Organization concurrence with information and/or commitments required.

Final Sent to USEC (Date/Initials)

Date Signed Copy Received at NRA:

Internal Distribution:

Remove names from last sentence
on page 32.

Distribution Completed (Date/Initials)

Assessment and Status of USEC Management Controls

Weekly Regulatory Call: This weekly conference call is chaired by the Nuclear Regulatory Assurance and Policy Manager and attended by the Nuclear Regulatory Affairs staffs at each plant and members of the NRAP headquarters organization. The call covers a wide range of topics of regulatory interest which include significant issues and events and the status of regulatory commitments.

A high priority has been placed on the completion of regulatory commitments before established due dates. Written requests for extensions are required for committed dates which cannot be satisfied. Performance in this area is included in a monthly Regulatory Performance Indicator Report prepared by the respective NRA staffs.

To facilitate assurance of timely completion for regulatory commitments both plants are developing program management plans (referred to as the integrated analysis of resource loading in Section 1.1 above) as a tool for effective resource allocation. This will enhance the ability to provide confidence for USEC and its regulatory oversight agencies in our ability to accomplish committed actions in accordance with mutually agreed schedules.

Periodic Reports: The Safety, Safeguards and Quality Managers provide independent, bi-weekly status reports to the Executive Vice President-Operations. These reports include candid observations of significant issues and concerns identified at the plants by their staffs.

Actions Planned

1. The NRAP Manager will evaluate the existing communications and reporting systems for potential improvements in the area of awareness of regulatory issues and plans. This review will be completed by August 31, 1996.
2. By June 30, 1996, each GDP will complete a program management plan which resource loads regulatory commitments. Completion of these plans is the responsibility of ~~Mr. S. Castro at PORTS and Mr. D. Lassiter at PGDP~~

*designated Program Managers reporting
to the General Manager at each GDP.*