



Department of Energy
Washington, DC 20585

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Mr. Joseph J. Buggy
[]
Westinghouse Savannah River Company
Building 703-A
Road 1
Aiken, SC 29802

Subject: Westinghouse Savannah River Price-Anderson Amendments Act Program
Review

Dear Mr. Buggy:

On April 24-25, 2001, the Department of Energy's (DOE) Office of Price-Anderson Enforcement (OE) conducted an onsite review of your Price-Anderson Amendments Act (PAAA) Program. The scope of our review encompassed the process for identification of PAAA noncompliances and the decision process to determine when reporting into the Noncompliance Tracking System (NTS) was necessary. In addition, we reviewed your process for causal determination and corrective action closure.

Our review concluded that your PAAA program generally meets DOE expectations and guidance, with the exception of several areas listed below. Our review also identified a number of strengths in your program, which are also listed below. Both of these areas are discussed in more detail in the attached report.

PAAA Program Strengths

- The PAAA Program is implemented as a sitewide process formally established by procedures.
- Personnel staffing levels were adequate and screening reviews were timely.
- Training for personnel appeared sufficient and the personnel interviewed were knowledgeable and capable of performing their responsibilities.
- The Regulatory Compliance Council (RCC) is providing effective review/concurrence of Noncompliance Tracking System (NTS) issues.
- The Corrective Action Program Procedure requires verification of closure and effectiveness reviews for corrective actions related to significant issues.

PAAA Program Weaknesses

- Significance categories are assigned to issues based on actual consequences; potential consequences are only optionally evaluated during issue categorization. In addition, evaluation of causes and corrective actions are optional for significance category 4 issues. This approach could impact quality problem resolution as required by Part 830.122(c) and may also minimize attention to problems that may be precursors of more serious issues.
- Not all sources of PAAA noncompliances are included in the review and screening by the Regulatory Points of Contact (RPOC). Although changes are in process to correct this weakness, at the time of our review, for example, external assessments were not included.
- The majority of identified PAAA noncompliances are event-related, versus the more proactive identification through assessments, etc. This approach appears to be related to the significance categorization process, which excludes most non-ORPS issues from PAAA screening.
- The organizational approval process for potential NTS reports may not provide sufficient independence. No specific examples of this problem were identified in this review.
- Recurring and programmatic deficiencies identified in Management Evaluation Reports are not consistently evaluated for PAAA noncompliances or NTS reporting.
- The significance category is assigned to an issue prior to the problem analysis and causal determination. No review of the significance category is performed after the problem analysis and cause determination.

Our review noted that many of the above deficiencies had been recognized and were either recently corrected or were being addressed by your staff. Specific examples include your recent revisions to the PAAA Program and related procedures. We were unable to evaluate the effectiveness of these changes due to their recent nature; however, we feel if appropriately implemented they would appear to address most of the deficiencies described above.

OE is currently involved in the development of an Enforcement Guidance Supplement (EGS) to outline our enforcement position relative to implementation of the Independent and Management Assessment requirements of 10 CFR 830.122. Towards that end, our onsite visit also included a review of the implementation of your Independent and Management Assessment Programs. Information obtained during our review will prove valuable in our development of the EGS; a summary of our review in this area is enclosed.

No reply is required in response to this letter. Questions should be directed to Susan Adamovitz at (301) 903-0125.

Sincerely,



R. Keith Christopher
Director
Office of Price-Anderson Enforcement

Enclosures:

PAAA Program Review Report
Independent and Management Assessment Summary

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Price-Anderson Amendments Act Program Review Westinghouse Savannah River Company

I. Introduction

During the period April 24-25, 2001, the DOE Office of Price-Anderson Enforcement (OE) performed an onsite review of the Westinghouse Savannah River Company (WSRC) program for identifying, screening, reporting, and correcting of Price-Anderson Amendments Act (PAAA) noncompliances. This review was conducted using the guidance provided by DOE Enforcement Guidance Supplement (EGS-00-02), *Price-Anderson Amendment Act (PAAA) Program Reviews*. Results of the PAAA Program Review are provided below.

II. General Implementation

The WSRC PAAA Program is implemented as a sitewide process. The program infrastructure is described in the following implementing procedures:

1. Manual 8B, Procedure CAP-11, *Identifying, Reporting and Tracking Nuclear Safety Noncompliances Under the Price-Anderson Amendments Act*
2. WSRC 1-01 Management Policies, Chapter 6.13, *Regulatory Compliance Council (RCC)*

A Regulatory Point of Contact (RPOC) has been designated for each WSRC division to have primary responsibility for the identification and screening of potential PAAA noncompliances for his division. When the RPOC identifies a potential NTS reportable issue, it is first approved at the division level, then presented to the Regulatory Compliance Council (RCC) for concurrence. The RCC is comprised primarily of the division RPOC personnel.

The RPOC staffing is one person per division and the level of commitment varied for each division from part time to full time. The RCC meets on a regular schedule and special sessions can be called if necessary. OE's review did not identify any concerns with the level of staffing for the divisions or the RCC. The staffing level appeared to be appropriate considering the number of PAAA issues being screened and the timeliness of the reviews.

Training and qualifications requirements for the RPOCs were added to the CAP-11 procedure in a revision dated April 10, 2001. The training consists of a PAAA module contained in the General Employee Training and PAAA orientation training provided to the RPOCs. The PAAA orientation training is described as training designed for individuals that identify, report, and track PAAA noncompliances. Additionally the Site Training Department provides an optional PAAA training course. OE's interviews with selected RPOCs concluded that they were knowledgeable of the process and could adequately implement their responsibilities.

III. Identification and Screening of Potential Noncompliances

The RPOCs are responsible for evaluating issues to determine if a PAAA noncompliance exists and to document this review in the WSRC Local Contractor Tracking System (LCTS). The sources of issues subjected to this review are identified in the CAP-11 procedure Table 1. OE's review of the version of Table 1 that had been used during the past 12 months found several sources of potential PAAA noncompliances that were notably missing from the Table. The missing areas included external assessments, Nonconformance Reports (NCR) and Problem Deficiency Reports (PDR). A recent revision to this procedure (dated April 10, 2001) updated the list of sources to include Problem Identification Reports (PIR). The procedure that implements the PIR process (WSRC 1B, MRP 4.21, *Problem Identification and Resolution Process*) states that after March 1, 2001, this process is mandatory and the PIR process would include NCRs and PDRs. Because the PIR process was newly implemented, OE's review could not determine its effectiveness or whether external assessments were included. Subsequent to the site visit, OE determined that WSRC plans to include external assessments in a later revision of the procedure.

Another concern identified during OE's review was that issues are automatically prescreened based upon a significance category. WSRC Procedure CAP-11, Table 1, identified that, in most cases, the PAAA review is limited to issues that are assigned a significance category of 1 or 2. The significance category, defined and controlled by WSRC procedure MP 5.35, *Corrective Action Program*, Revision 3, dated March 1, 2001, is based on the actual consequences of the issue, and does not require consideration of potential consequences. Also, the significance assignment is made by the organization responsible for correcting the issue, which does not provide an independent determination. Any issue assigned a significance category 3 or 4 does not meet the threshold for review by the RPOCs for PAAA applicability and is automatically excluded from consideration.

OE's review of Radiological Deficiency Reports (RDR) from January 2000 until January 2001 identified that almost all of the RDR issues during this period were assigned a significance category 3 or 4. In addition, OE's review of issues screened for PAAA noncompliances during this period indicated only a couple of Facility Evaluation Board (FEB) report issues had been included. OE's

discussions with WSRC personnel determined that the lack of FEB issues being screened was due to the preponderance of these issues being assigned a significance level 3 or 4.

As a result of limiting the PAAA reviews to significance category 1 and 2 items, only 6 % (11 of 190) of issues screened during a one year time frame were not from ORPS reports. OE's review of the RDR database and of selected FEB reports (for the one-year period) identified a number of issues that should have been included in the local tracking system as PAAA noncompliances. One example is RDR 00-HCAN-033, which states that the worker continued to support pulling samples in the HCSA after 10K dpm/100cm² alpha had been discovered on the floor. As a result the airborne suspension guide limit was exceeded. This RDR was assigned a significance category 4, the lowest significance defined in MP 5.35 as having minimal/negligible impact on safe facility operations, worker safety and health. Significance category 4 did not meet the defined threshold for review for PAAA noncompliances, and therefore no PAAA review was performed for this issue.

This problem has been partly corrected in the newly issued WSRC procedure MRP 4.21. This procedure does require that all (including significance category 3 and 4) PIRs be screened for PAAA applicability. The significance category 3 and 4 issues will be placed in the local tracking system with no further review.

IV. Evaluation of NTS Reportability

The RPOCs perform the screen for NTS reporting using guidance and a form provided in the CAP-11 procedure. Only issues meeting the procedural requirements for significance category 1 and 2 are forwarded to the RPOCs for this review. The NTS reportability criteria contained in attachment 3 of the CAP-11 are consistent with DOE expectations. Once the RPOC has identified a candidate for NTS reporting, the procedure requires the RPOC to obtain appropriate reviews and approvals within their organization. The OE review team had a concern that this requirement would potentially eliminate any independence from the process and may create a chilling effect if the owner of a problem had to approve whether the issue should be reported to DOE. OE's discussions with the RPOCs and a review of PAAA issues that were evaluated for NTS reporting did not identify instances where this occurred.

Once the RPOC receives approval from his organization, the potential NTS issue is presented to the RCC for approval. A chairman heads the RCC, which is comprised of the RPOC representatives from each division. OE's review of the results of this process determined that it was effective in evaluating issues for NTS reporting when those issues were presented to the RCC. The RCC did not perform any independent review of issues not identified by a RPOC as a candidate for NTS reporting.

OE's review could find no evidence that programmatic or recurring issues, that may be crosscutting divisions or sitewide, were being evaluated for PAAA NTS reportability. The RPOC is responsible to identify recurring or programmatic issues within their division. Each division also performs periodic Management Evaluations (ME) to evaluate and identify systemic issues occurring within the division. The ME systemic issues are required to have a significance category assigned and are only evaluated in the PAAA screening if the assigned significance category is 1 or 2. OE found this process to be ineffective in that OE's review of several of the ME reports identified that significance categories are not being assigned consistently. In addition, the database of issues screened for PAAA did not contain any issues from ME reports. In some cases the ME evaluation had already determined a recurring or programmatic problem existed which, if PAAA applies, which would meet the criteria for NTS reporting.

OE's review also identified recurring issues in the Radiation Program Triennial review. Seven of fourteen divisions had findings (identified in a FEB Report) where personnel were frisking out of contaminated areas using the equipment inappropriately to detect any contamination. An ME (ESH-SHO-00-0119, *Management Evaluation, Functional Area II, Radiation Protection*) was performed which included the results of the Triennial review (FEB reports) and identified this inadequate frisking as a roll up issue. In this case none of the roll up issues in the ME report were reviewed for potential NTS reporting.

Several of the WSRC procedures require the division to perform trending of issues and to develop a report of the results. In addition, WSRC is implementing a statistical trending process to monitor long term trends. This process, described in Manual 8B, Procedure CAP-13, *Statistical Trending*, currently can trend ORPS data and is being expanded to include other sources such as PIDs. OE was presented a demonstration of the statistical trending capabilities and some examples; however, since this process is just being implemented OE could not judge its effectiveness.

V. Cause Determination

WSRC uses the significance categorization process to determine the level of causal analysis required. The process requirements are identified in WSRC 1-01, MP 5.35, *Corrective Action Program*. During this process, the significance category is assigned to the issue prior to performing the problem analysis and cause determination. No re-evaluation of the significance category is performed following the problem analysis despite this additional information.

This lack of re-evaluation was noted as a concern by OE, since even if a causal analysis identified recurring or programmatic issues, the issues would not get screened for PAAA applicability. OE's review did not identify any specific examples of this problem occurring.

VI. Corrective Action Identification and Closure

As noted earlier, the WSRC Corrective Action Program (as described in MP 5.35) includes a significance categorization process for identified issues. Managers are directed to assign the significance ranking on actual consequences; potential consequences (i.e., what might have occurred) are only optionally evaluated. Based on a significance ranking of category 4, managers may elect to perform no cause determination or corrective actions for the issues, which may not be compliant with 10 CFR 830.122(c), Management/Quality Improvement requirements for quality problems pertaining to a nuclear facility. Additionally, prioritizing based only on actual consequences precludes the appropriate level of attention to problems or events that may be precursors of more significant problems.

WSRC MP 5.35 also includes requirements for verification of closure of corrective actions and for an additional review to determine the effectiveness of corrective actions. For appropriately ranked issues and corresponding corrective actions, the requirements for verification of closure and review for effectiveness are considered necessary and positive attributes of this program.

VII. Conclusions

OE concluded that the WSRC program generally meets the OE expectations and guidance, with the exception of the areas of weakness identified in this report. The review identified several positive program attributes. During discussion with WSRC personnel, it was apparent that recent or ongoing changes were being made to address most of the areas of weakness.

**Office of Price-Anderson Enforcement
Independent and Management Assessment Review
Westinghouse Savannah River Company**

I. Introduction

During the period April 24-25, 2001, the DOE Office of Price-Anderson Enforcement (OE) reviewed elements of the Westinghouse Savannah River Company (WSRC) Independent and Management Assessment (IMA) Program. This pilot review was performed to collect information for an Enforcement Guidance Supplement (EGS) that is currently being developed by OE. Once completed, the EGS will outline the OE enforcement position relative to the IMA requirements of 10 CFR 830.122, and will serve as a guide for future OE formal reviews of contractor IMA programs.

Despite the pilot nature of the review, OE did identify areas of positive performance that are described below. The OE review also identified several deficient areas that, subsequent to the formal promulgation of the EGS, may reflect potential noncompliance with 10 CFR 830.122 requirements. These are also summarized below.

II. Overview

A. Independent Assessment

The WSRC Independent Assessment Program is implemented through the Facility Evaluation Board (FEB) process. Organizationally, the FEB is located within the Environment, Safety, Health and Quality Assurance (ESH&QA) Division. FEB teams conduct multidiscipline assessments of Savannah River Site facility operations, site self-assessment activities, site support divisions, and site safety, health, quality assurance and environmental programs.

B. Management Assessment

The WSRC Quality Assurance Management Plan (WSRC-RP-92-225, Rev. 9) identifies that the WSRC Management Assessment Process includes self-assessments (both at the individual assessment unit and programmatic levels) and Management Evaluations (ME).

Each operating division or large facility establishes specific self-assessment activities, following general guidance and requirements established at the institutional level. Types of assessments performed varied across divisions and included task observation, vertical slices reviews, and team reviews.

As part of the ME process, WSRC managers periodically (typically annually) evaluate feedback information (including assessment results, operating experience, etc.) for their facility, division or functional area; and identify strategic opportunities to improve performance. The process and results are captured in formal ME reports.

C. Corrective Actions

WSRC currently implements a series of parallel corrective action mechanisms (including Nonconformance Reports, Radiological Deficiency Reports, Program Deficiency Reports, Corrective Action Reports, and various Division-specific issues management systems).

III. Results

The OE review identified various observations (both positive and negative) that are considered highly relevant to the development of the EGS criteria. These observations are summarized below.

The following program strengths and/or positive initiatives were noted during the subject review:

- The FEB assessment process was noted as a significant strength. Roles and responsibilities were established by procedures; FEB assessments were thorough, comprehensive, identified significant findings, and provided follow-up to previously identified issues. FEB team leaders were well-qualified, typically coming from facility management positions. The FEB process appeared to be strongly supported by site senior management.
- An extensive level of self-assessment activity was being conducted across the site; at least one facility conducted as many as 300 self-assessments in one year.
- WSRC has taken several significant actions to respond to identified deficiencies in the self-assessment area. WSRC engaged the Institute for Nuclear Power Operations to evaluate the WSRC assessment and corrective action programs in March 2000. WSRC subsequently visited the H.B. Robinson Nuclear Plant to obtain information on their successful self-assessment program. WSRC is also currently implementing a pilot revised self-assessment process at several site facilities.

- WSRC is also taking actions to integrate/improve their various corrective action processes. Actions completed and/or planned include merging of several of the discrete mechanisms and eventual implementation of a sitewide data “warehouse” to allow trending and review for systemic issues.

The following areas of deficient implementation were also noted during the current review. Subsequent to issuance of the EGS and more formal OE reviews of this area, several of the following deficiencies would be considered potential noncompliances of 10 CFR 830.122 requirements.

- Management level of involvement in the self-assessment process was noted to be inconsistent across divisions. In some cases self-assessments are conducted by supervisors and managers; however, some divisions or facilities appear to rely almost entirely on assessments conducted by worker-level individuals.
- Although potentially an effective mechanism for achieving quality improvement, several reviewed MEs appeared to provide only a recap of previously identified issues, with few if any new improvement opportunities. MEs also occasionally failed to provide a clear statement of identified issues, instead linking corrective actions to broadly stated program objectives.
- Certain procedural requirements (from ME-1, Management Evaluation) were not being met. Specifically, requirements to assure all ME’s were being completed and to produce an annual summary report of the ME process were not met.
- Deficiencies identified through self- or management assessments were not always being placed in formal corrective action/tracking processes.
- OE noted a few examples in which corrective actions in response to FEB findings were either limited or insufficiently institutionalized, leading to recurrence. In one example, a FEB assessment noted that facility pre-fire plans located in the field were out of date. The corrective action (replace with current version) did not address the update process; consequently a later FEB assessment identified the same problem. In another example, the FEB noted a lack of management presence in the field. The facility response directed more management involvement in housekeeping assessments and observation of operator rounds; however, these actions were not institutionalized by policy or directive, making their lasting value doubtful.
- OE also noted several examples in which the corrective action in response to an FEB finding was to focus on that area in the upcoming year’s self-assessment plan. While that action may be helpful to verify that corrective actions have been effective, it is not viewed as an appropriate correction to the worker practice or behavior problems found.

The above items are provided for appropriate consideration by WSRC. No response to OE is required for this pilot review report.