



UNITED STATES  
NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

September 1, 1995

MEMORANDUM TO: Tom Wenck, T-8A-33  
FCSS, FCEB, NMSS

FROM: Jack Spraul, T-7J-9  
HLW&QAS, HLUR, NMSS

*JS*

SUBJECT: REQUEST FOR ADDITIONAL INFORMATION (RAI)

I have reviewed the "Quality Assurance Program" (QAP) portion of the August 25, 1995 USEC submittal (Rifakes to Paperiello) of revised application sections for NRC Advance Review. The submittals of the QAP were identical for both the Portsmouth and the Paducah Gaseous Diffusion Plants. For acceptance criteria, I used the basic and supplementary requirements of ASME NQA-1-1989 Edition, "Quality Assurance Program Requirements for Nuclear Facilities." I did not use the appendixes of ASME NQA-1-1989 as part of my acceptance criteria.

In addition to reviewing the QAP in detail, I also performed an overview of the following portions of the SARs of both GDPs as referenced in the QAP and to see whether there are any conflicts with the QAP:

1. Chapter 4, "Accident Analysis" - Unavailable
2. Section 6.1, "Organization and Administration," - (8/25/95)
3. Section 6.2, "Safety Committees," - (8/25/95)
4. Section 6.3, "Plant Changes and Configuration Management" - Unavailable
5. Section 6.4, "Maintenance," - (8/18/95)
6. Section 6.5, "Operations," - (8/18/95)
7. Section 6.6, "Training," - (8/25/95)
8. Section 6.8, "Audits and Assessments," - (8/25/95)
9. Section 6.10, "Records Management and Document Control," - (8/11/95)
10. Section 6.11, "Procedures," - Unavailable

Based on the relatively short time allotted, I did not complete my review. However, I conclude that the QAP is acceptable for review when submitted as part of the complete Application and that there are no conflicting commitments between the QAP and the SARs. My review resulted in the attached Request for Additional Information (RAI).

The acceptability of the safety/quality classifications (as discussed below) of the plant structures, systems, and components (SSCs) should be assigned to and determined by NRC technical staff prior to certification of either GDP. Section 2.2.2 of the QAP defines the scope of the QAP. Section 2.2.2 identifies three categories of SSCs and related activities:

CONTACT: Jack Spraul, NMSS  
415-6715

200050

9510230177 950901  
NMSS SUBJ  
102.7 CF

102.7  
NHXO

T. Wenck

2

1. "Q" - SSCs identified from the Accident Analysis (SAR Chapter 4) as "safety systems" and "design features for safety" which are required to protect 1) the health and safety of workers 2) the health and safety of the public, and 3) the environment. Additionally, SSCs required by Nuclear Criticality Safety Approvals are also classified "Q." SSCs classified as "Q" are placed on a "Q List." The QAP applies to these items and to associated activities and services that could affect their safety function.
2. "AQ" - SSCs and associated activities and services that are not "Q" but are subject to regulatory requirements. SSCs classified as "AQ" (Augmented Quality - a level of QA above standard industry practice) are placed on an "AQ List." Section 2.1, Section 2.2, and Appendix A of the QAP apply to these SSCs and to associated activities and services.
3. "NS" - All other SSCs and associated activities and services are in this "NS" or "Non-Safety" category.

The QAP indicates that the Accident Analysis, Chapter 4 of the SAR, identifies SSCs classified as "Q" based on the accident analysis. Item 1 of the attached RAI asks where SSCs required by Nuclear Criticality Safety Approvals (and classified as "Q") are identified in the application. SSCs and associated activities and services classified as "AQ" are identified in the matrix provided as Appendix A (page 45) of the QAP. To repeat, the acceptability of the safety/quality classifications of the SSCs of the GDPs should be assigned to and determined by the technical staff. While this can be initiated immediately for the "AQ" items and activities and continued upon receipt of SAR Chapter 4, it can not be completed until receipt of an acceptable response to Item 1 of the attached RAI.

If you have any questions or comments, call me on 415-6715.

DISTRIBUTION w/attachment:      Central File      NMSS r/f      DWM r/f  
 HLUR r/f                      JJHolonich      JHickey              WSchwink              MHorn  
 CSawyer  
w/o attachment:      MFederline      JSurmeier

In small box on "OFC" line enter: C = Cover only, E = Cover & enclosure, N = No copy  
 In small box on "DATE" line enter: M = E-mail distribution, H = Hard copy

OFC	HLUR	E	HLUR	E					
NAME	JGSpraul:dh		JThomas						
DATE	09/01/95	H	09/1/95	H					

DOCUMENT NAME: S:\DWM\HLUR\JGS\GDPQA03.RAI

OFFICIAL RECORD COPY

## REQUEST FOR ADDITIONAL INFORMATION

### Quality Assurance Program (QAP)

1. Section 2.2.2 of the QAP states that the Accident Analysis, Chapter 4 of the SAR, identifies "Q" systems and design features based on the accident analysis. Section 2.2.2 of the QAP goes on to state: "Additionally, SSCs required by Nuclear Criticality Safety Approvals (NSCAs) are also identified." Clarify where in the SAR these SSCs are identified.
2. The fourth paragraph in Section 6.1 of the SARs states: "The line organization is responsible for the safe operation of the GDP." Identify what organizations make up "the line organization." Contrariwise, the fourth paragraph in Section 6.1.1 of the SARs states: "USEC is responsible for safe operation of the GDPs." Clarify.
3. The second paragraph of Section 6.1.1.3 of the SARs states that the Nuclear Regulatory Assurance and Policy Manager is responsible "for conducting audits to verify that the Quality Assurance Plan is implemented at the GDPs." Briefly describe how this is accomplished.
4. Section 6.1.1.6 of the SARs discusses the position(s) of the Safety, Safeguards, and Quality Manager; and Figure 6.1-1 of the SARs shows the position(s) located at each plant. Clarify whether the position(s) is (are) filled with two individuals (one at each site) as indicated by the Figures or by one individual as indicated by the texts.
5. Figure 2-2 (Page 40) of the QAP shows that the Safety, Safeguards, and Quality Manager(s) has (have) three organizations reporting to him (them). Indicate the approximate size of each of these organizations, where they are located, and whether their personnel are part of USEC or part of LMUS. Briefly describe how they function.
6. The second paragraph of Section 6.1.1.16 of each SAR states: "The Technical Operations Manager is responsible for engineering activities in support of operations, including design, fabrication, and construction of plant modifications or additions, safety analysis (*PORTS only*), the configuration management program, and quality control." This can be interpreted in at least two ways:
  - The Technical Operations Manager is responsible for 1) engineering activities in support of operations, including design, fabrication, and construction of plant modifications or additions, 2) safety analysis, 3) the configuration management program, and 4) quality control.
  - The Technical Operations Manager is responsible for engineering activities in support of 1) operations including design, fabrication, and construction of plant modifications or additions, 2) safety analysis, 3) the configuration management program, and 4) quality control.

Please clarify the sentence. Based on Section 6.4.2.5 of the PORTS SAR and Section 6.4.2.4 of the PGDP SAR, the first interpretation appears to be correct and the Technical Operations Manager "is responsible for ... quality

control." If this is true, briefly describe how this responsibility is met. If not true, indicate the manager at each plant who is responsible for quality control and briefly describe how this responsibility is met.

7. Figure 6.1-2 of the PGDP SAR shows the Training Manager reporting to both the Portsmouth Plant Manager and the Paducah (Deputy) Plant Manager. Figure 6.1-2 of the PORTS SAR shows the UE Procedures Manager reporting to both the Paducah Plant Manager and the Portsmouth (Deputy) Plant Manager. This difference should be explained (if intentional) or corrected (if unintentional).

8. Indicate, by position title, the PORC member and alternate who represent the functional area of quality assurance at each GDP.

9. Section 6.6.1 of the SARs indicate that the (central) training staff audits division training activities. Indicate whether personnel performing these audits (auditors and lead auditors) are qualified in accordance with Section 2.2.4 of the QAP. Also, indicate whether these audits are in addition to the audits performed under the responsibility of the Safety, Safeguards, and Quality Manager as specified in Item 4 of Section 2.18.3.2 of the QAP.

10. Section 6.6.12 of the PORTS SAR and Section 6.6.13 of the PGDP SAR limit the training of quality control inspection personnel to the qualification and requalification of 1) Code, Mechanical, and Welding Inspection personnel and 2) nondestructive examination personnel. The third paragraph of QAP Section 2.2.4 states that the qualification and requalification of inspection personnel is performed in accordance with the requirements of Supplement 2S-1 to ASME NQA-1-1989. Rectify these two commitments. Also clarify whether personnel who perform tests to verify conformance to specified requirements for the purpose of acceptability (for example, post-maintenance tests discussed in Section 6.4 of the SARs) are also qualified and requalified in accordance with the requirements of Supplement 2S-1 to ASME NQA-1-1989. Finally, specify the maximum recertification intervals for nondestructive examination personnel.

11. Provide a clear commitment in Section 6.8 of the SARs that assessments are performed in accordance with a documented plan and that assessment results are documented. Also, the last sentence of SARs' Section 6.8.1.7, "Management Self-Assessments Activities," starts: "Inspections are performed ... ." Should not "Inspections" be "Management self-assessments"?

12. Item 2 in Section 2.5.3 of the QAP addresses the use of "general administrative procedural controls" (instead of "detailed step-by-step written procedures") for a number of "skill-of-the-craft" activities. These activities may be relatively routine and not too complex, but clarify what is meant by "general administrative procedural controls" and how these controls will satisfy NQA-1 Basic Requirement 5, "Instructions, Procedures, and Drawings."

13. Identify who (by position title) is responsible for inspection planning as required by Section 4 of Supplement 10-S1 of NQA-1.

14. Item 2 in Section 2.18.3.2 of the QAP indicates that a three-year cycle will be used for auditing non-commercial grade suppliers. This is acceptable to the staff if the suppliers are evaluated annually in the years between audits. Provide such a commitment or justify why such a commitment is inappropriate.

15. Item 3 in Section 2.18.3.2 of the QAP indicates that the requirements of Section 2 of the QAP are audited at least once every three years. This is not in-line with NRC Regulatory Guide 1.28 (for design and construction of nuclear power plants) which states: "Internal Audits" - Applicable elements of an organization's quality assurance program should be audited at least once each year or at least once during the life of the activity, whichever is shorter." This guidance has also been applied to operating nuclear power plants (10 CFR Part 50), work related to the disposal of radioactive wastes in geologic repositories (10 CFR Part 60), packaging and transportation of radioactive wastes (10 CFR Part 71), and independent spent fuel storage installations (10 CFR Part 72). Reduce the proposed three-year internal audit cycle for the GDPs (10 CFR Part 76) to a one-year cycle or justify why this is inappropriate.

16. The "AQ List' Criteria" on Figure A-2 (Page 46) of the QAP may be too broad. That is, if failure of an item could reasonably result in "Serious injury to personnel," "Significant adverse impact on the environment," or "The spread of radioactive contamination," it appears that the item should be on the "Q List" rather than the "AQ List." We note that Section 2.2.2 of the QAP indicates that items on the "Q List" are those "necessary to prevent or mitigate the consequences of postulated accidents that could cause undue risk to the health and safety of the public, workers, and the environment. Revise the criteria or justify why this is inappropriate. Also, remove "Chemical Safety" from Figure A-1 (Page 45) of the QAP or justify why this is inappropriate.