



Department of Energy

Washington, DC 20585

QA: L

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OFFICE OF CIVILIAN RADIOACTIVE WASTE MANAGEMENT (OCRWM) QUALITY ASSURANCE SURVEILLANCE M&O-SR-97-020 OF THE PEER REVIEW OF THE DUKE POWER COMPANY RADIAL BURNUP GRADIENT DATAFILE

Enclosed is the report from the OCRWM Surveillance M&O-SR-97-020 conducted by the Office of Quality Assurance at the Civilian Radioactive Waste Management System Management and Operating Contractor's (CRWMS M&O) offices in Vienna, Virginia, on March 14, 1997. The surveillance was conducted to determine the adequacy of the QAP-3-3 Peer Review conducted by the CRWMS M&O on the Duke Power Company Radial Burnup Gradient Datafile.

The surveillance team found that the Peer Review process was effective in determining the adequacy of the data for use. The surveillance team did not identify any deficiencies during the surveillance.

Please contact me at (702) 794-5568 or James J. George at (202) 586-7220 if you have any questions.

R.G. Horton
Er Donald G. Horton, Director
Office of Quality Assurance

OQA: DGH-1336

Enclosure:
Surveillance Report M&O-SR-97-020

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**OFFICE OF CIVILIAN
RADIOACTIVE WASTE MANAGEMENT
U.S. DEPARTMENT OF ENERGY
WASHINGTON, D.C.**

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M&O-SR-97-020
Surveillance No. ~~YM-SR-97-020~~ JG 3/24/97

**QUALITY ASSURANCE SURVEILLANCE RECORD
SURVEILLANCE DATA**

1. ORGANIZATION/LOCATION: CRWMS M&O/Vienna, Virginia	2. SUBJECT: QAP-3-3, Revision 3, Peer Review	3. DATE: 3/14/97
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4. SURVEILLANCE OBJECTIVE:
To determine the adequacy of the Peer Review conducted by the M&O on the Duke Power Radial Burnup Gradient Datafile.

5. SURVEILLANCE SCOPE: Determine that Peer Review initiated and conducted per QAP-3-3 requirements: -Peer Review Plan describes work to be reviewed, review criteria, and expertise/size of group. -Peer Reviewers have technical credentials that are recognized and verified prior to start of work, are independent of the original work to be reviewed, and conduct review using guidance in Plan. -Peer Review Report prepared and signed by all reviewers, Peer Review Checklist completed, and records processed and submitted to the records center. -Scope of Peer Review, to qualify the adequacy of the pin burnup values in the datafile, is met.	6. SURVEILLANCE TEAM: Team Leader: James George Additional Team Members: NA NA
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7. PREPARED BY: James George / <u>James George</u> Surveillance Team Leader	Date: 03/03/97	8. CONCURRENCE: Robert W. Clark / <u>R.W. Clark</u> QA Division Director	Date: 3/11/97
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SURVEILLANCE RESULTS

9. BASIS OF EVALUATION / DESCRIPTION OF OBSERVATIONS:
SEE attached pages 2 & 3 of B.4.
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10. SURVEILLANCE CONCLUSIONS:
SEE attached page 8 of B.4. CW 4-11-97
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11. COMPLETED BY: James George / <u>James George</u> Surveillance Team Leader	Date: 3/28/97	12. APPROVED BY: <u>R.W. Clark</u> QA Division Director	Date: 4/11/97
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9. BASIS OF EVALUATION / DESCRIPTION OF OBSERVATIONS:

The surveillance was conducted to assess the adequacy of the Peer Review conducted by the CRWMS/M&O on the Duke Power Radial Burnup Gradient Datafile, a datafile containing pin burnup values extracted from a fuel management database. The scope of the Peer Review was limited to determining the adequacy of the radial burnup gradient information in order to qualify the adequacy of the pin burnup values presented in the datafile for use in the design of spent nuclear fuel (SNF) packages. The activities evaluated during the surveillance are presented in the Surveillance Scope section of the Quality Assurance Surveillance Record (QASR).

PERSONNEL CONTACTED

Personnel contacted during the surveillance are as follows:

Roger Johnson	M&O/TRW	Peer Review Chairperson
Dale B. Lancaster	M&O/TRW	Task Leader

SUMMARY OF SURVEILLANCE RESULTS

QA Program Surveillance Activities

The objective evidence reviewed during the surveillance is as follows:

1. Memorandum, dated 1/9/97, D. B. Lancaster to M. R. Wisenberg, Appointment of R. Johnson as Peer Review Chairperson for Review of Radial Burnup Gradient Datafile.
2. Memorandum, dated 1/24/97, D. B. Lancaster to M. R. Wisenberg, Nomination of Radial Burnup Gradient Datafile Peer Review Members.
3. Memorandum, dated 1/24/97, D. B. Lancaster to S. Benesole, Request for Regulatory & Licensing Evaluation of the Radial Burnup Gradient Datafile Scope (documenting request for Regulatory & Licensing Manager evaluation to determine if there is need for M&O Legal Counsel to proceed).
4. Memorandum, dated 2/12/97, R. O. Johnson to Distribution, Initial Meeting of the Radial Burnup Gradient Datafile Peer Review Group (documenting directions to complete required reading to QAP-2-1 indoctrination and training, QAP-3-3 peer review, AP-16.1Q performance/deficiency reporting, and AP 17.1Q record source responsibilities).

Also includes Attachment 1, Peer Review Plan of the Radial Burnup Gradient Datafile, dated 2/12/97, and Attachment 2, Memorandum, dated 2/11/97, M. R. Wisenberg to File, M&O Legal Counsel Comments Concerning the QAP-3-3 Peer Review of the Burnup Gradient Datafile. The Peer Review Plan described work to be reviewed, review criteria, required expertise and size of Peer Review Group.

5. Memorandum, dated 2/26/97, C. Kang to R. Johnson, Peer Review of Radial Burnup Datafile (review comments).

6. Memorandum, 2/26/97, R. O. Johnson to File, Duke Power Co. PWR Radial Burnup Gradient Datafile (documenting the M&O licensing legal counsel recommendations and comments from the 2/11/97 M. R. Wisenberg memorandum).

7. Memorandum, dated 2/24/97, D. Lancaster to R. O. Johnson, Peer Review of Radial Burnup Datafile (review comments).

8. Memorandum, dated 2/26/97, P. Lopez to R. O. Johnson, Peer Review of Radial Burnup Credit Datafile (review comments).

9. Memorandum, dated 2/20/97, S. G. Gillespie to R. O. Johnson, Peer Review of Radial Burnup Credit Datafile (review comments).

10. Memorandum, dated 2/12/97, D. B. Lancaster to Chimisa D. Gordon, Verification of Minimum Qualifications of the Radial Burnup Gradient Datafile Peer Review Members (requesting verification of Gillespie, Johnson, Kang, Lancaster, and Lopez).

11. Memorandum, dated 2/28/97, Chimisa G. Walker to D. B. Lancaster, Verification of Minimum Qualifications of the Radial Burnup Gradient Datafile Peer Review Members (verification of qualifications including special requirements specified in the Peer Review Plan).

12. Peer Review Report for the Radial Burnup Gradient Datafile for PWR Assemblies, dated 3/19/97 and signed by all reviewers. Conclusions in the report indicate that pin burnup results (values) in the datafile are appropriate for use in CRWMS M&O quality affecting work.

13. Peer Review Checklist, dated 3/21/97.

Summary of Deficiencies

No deficiencies were identified during the surveillance.

Recommendations

No recommendations resulted from the surveillance.

10. SURVEILLANCE CONCLUSIONS:

Results of the surveillance indicated that the peer review was performed in accordance with the requirements of the applicable procedures; all of the specific surveillance scope items were verified to have been completed, as evidenced within the objective evidence reviewed during the surveillance listed above; and the peer review determined that the datafile was acceptable for use in design activities.