

April 25, 2011

MEMORANDUM TO: Eric J. Leeds, Director
Office of Nuclear Reactor Regulation

Scott W. Moore, Acting Director
Office of Federal and State Materials
and Environmental Management Programs

Catherine Haney, Director
Office of Nuclear Material Safety and Safeguards

Michael R. Johnson, Director
Office of New Reactors

FROM: Brian W. Sheron, Director */RA/*
Office of Nuclear Regulatory Research

SUBJECT: IMPENDING PUBLICATION OF NUREG-0713, VOLUME 31,
"OCCUPATIONAL RADIATION EXPOSURE AT COMMERCIAL
NUCLEAR POWER REACTORS AND OTHER FACILITIES,
2009"

I am forwarding this memorandum for your information on the publication of the final report for NUREG-0713, Volume 31, "Occupational Radiation Exposure at Commercial Nuclear Power Reactors and Other Facilities, 2009." The Office of Nuclear Regulatory Research (RES) will submit this final report for publication in 2 weeks.

NUREG-0713, Volume 31, summarizes the 2009 occupational radiation exposure data maintained in the U.S. Nuclear Regulatory Commission's (NRC's) Radiation Exposure Information and Reporting System (REIRS) database. Seven categories of NRC licensees are required to annually report individual exposure data in accordance with 10 CFR 20.2206. NUREG-0713, Volume 31, currently contains information on five categories of NRC licensees because no high-level waste geologic repositories are in operation and all low-level waste disposal facilities are regulated by Agreement States. This report reflects the occupational radiation exposure data that NRC received from 195 licensees of which 104 were commercial operators of nuclear power reactors.

CONTACT: Doris E. Lewis, RES/DSA
301-251-7559

Compilations of the reports submitted by the 195 licensees indicated that 189,124 individuals were monitored, and 88,429 of these individuals received a measurable occupational dose. The collective dose incurred by these individuals was 11,892 person-rem and the average measurable dose was 0.18 rem. The collective dose incurred by these individuals represents a 5% increase from the 2008 value (11,301 person-rem) due to the increase in collective dose at commercial nuclear power reactors. The average collective dose per reactor for light water reactor licensees was 96 person-rem. This represents a 9% increase from the 2008 value (88 person-rem) due to a 12% increase in total outage hours in 2009. During outages, activities such as refueling and maintenance involve increased radiation exposure. In 2009, no individual exceeded the 5 rem annual occupational dose limit.

The REIRS data has allowed the NRC staff to (1) quantitatively assess the effectiveness of licensee's as low as is reasonably achievable (ALARA) programs; (2) evaluate the impact of transient individuals on the dose distribution; (3) provide basic data for government and private inquiries about occupational radiation exposures at NRC-licensed facilities; and (4) provide occupational radiation exposure history reports to individuals who were exposed to radiation at NRC-licensed facilities.

Staff in the Offices of Nuclear Reactor Regulation, Federal and State Materials and Environmental Management Programs, Nuclear Material Safety and Safeguards, and New Reactors reviewed a draft of this report that was transmitted with a memorandum dated December 12, 2010, and the enclosed final report reflects the resolution of their comments.

RES has established an online quality survey to collect feedback from user offices on the usefulness of RES products and services. Stephanie Bush-Goddard, the RES Branch Chief responsible for this product, will send the URL for this survey to her counterparts in your office via e-mail. I would appreciate it if you would see that this short—about 5 minutes—survey is completed and returned to RES by the responsible manager or supervisor within 10 working days of receiving the e-mail to give your office's views of the delivered RES product.

Enclosure:
As stated

Compilations of the reports submitted by the 195 licensees indicated that 189,124 individuals were monitored, and 88,429 of these individuals received a measurable occupational dose. The collective dose incurred by these individuals was 11,892 person-rem and the average measurable dose was 0.18 rem. The collective dose incurred by these individuals represents a 5% increase from the 2008 value (11,301 person-rem) due to the increase in collective dose at commercial nuclear power reactors. The average collective dose per reactor for light water reactor licensees was 96 person-rem. This represents a 9% increase from the 2008 value (88 person-rem) due to a 12% increase in total outage hours in 2009. During outages, activities such as refueling and maintenance involve increased radiation exposure. In 2009, no individual exceeded the 5 rem annual occupational dose limit.

The REIRS data has allowed the NRC staff to (1) quantitatively assess the effectiveness of licensee's as low as is reasonably achievable (ALARA) programs; (2) evaluate the impact of transient individuals on the dose distribution; (3) provide basic data for government and private inquiries about occupational radiation exposures at NRC-licensed facilities; and (4) provide occupational radiation exposure history reports to individuals who were exposed to radiation at NRC-licensed facilities.

Staff in the Offices of Nuclear Reactor Regulation, Federal and State Materials and Environmental Management Programs, Nuclear Material Safety and Safeguards, and New Reactors reviewed a draft of this report that was transmitted with a memorandum dated December 12, 2010, and the enclosed final report reflects the resolution of their comments.

RES has established an online quality survey to collect feedback from user offices on the usefulness of RES products and services. Stephanie Bush-Goddard, the RES Branch Chief responsible for this product, will send the URL for this survey to her counterparts in your office via e-mail. I would appreciate it if you would see that this short—about 5 minutes—survey is completed and returned to RES by the responsible manager or supervisor within 10 working days of receiving the e-mail to give your office's views of the delivered RES product.

Enclosure:
As stated

DISTRIBUTION:

DSA r/f

ADAMS Accession No.:ML110820489

OFFICE	RES/DSA/HEB	BC:RES/DSA/HEB	TECH EDITOR	D: RES/DSA	D: RES
NAME	DLewis	SBush-Goddard	JZabel(via email)	KHalveyGibson	BSheron
DATE	3/24/11	4/1/11	03/23/11	4/11/11	4/ 25 /11

OFFICIAL RECORD COPY