

FINAL OMB SUPPORTING STATEMENT FOR
NRC FORM 5
OCCUPATIONAL DOSE RECORD FOR A MONITORING PERIOD

(3150-0006)

EXTENSION

Description of the Information Collection

The NRC Form 5, "Occupational Dose Record for Monitoring Period," is used by NRC to compile and analyze occupational radiation dose information to assess the effectiveness of licensees' radiation protection programs and uses this information for planning inspections at licensee's facilities. NRC also uses this information to ensure that licensees are complying with the appropriate regulations to protect worker and public health and safety. Section 20.2206(c) requires licensees to submit their occupational radiation dose data, covering the preceding year, to NRC, on or before April 30 of each year. NRC Form 5 specifies the use of the individual's name, social security number or other unique identification, date of birth, and sex. This information is necessary to ensure the proper identification of the individual. NRC uses REIRView, a dose record data validation software, that assists in verification of file format of annual dose records submitted to the Radiation Exposure Information and Reporting System (REIRS).

A. JUSTIFICATION

1. Need for and Practical Utility of the Information Collection

The purpose of Title 10 of the *Code of Federal Regulations* Part 20 (10 CFR Part 20) is to establish "Standards for Protection Against Radiation." 10 CFR Part 20 provides requirements to persons licensed by the U.S. Nuclear Regulatory Commission (NRC) to receive, possess, use, transfer, or dispose of byproduct, source, or special nuclear material or to operate a production or utilization facility under parts 30 through 36, 39, 40, 50, 52, 60, 61, 63, 70, or 72. In addition, 10 CFR Part 20 applies to persons required to obtain a certificate of compliance or an approved compliance plan under 10 CFR Part 76.

Pursuant to 10 CFR 20.1502 licensees are required to monitor exposures to radiation and radioactive material at levels to demonstrate compliance with the occupational dose limits in 10 CFR 20.1201. 10 CFR 20.2104 requires licensees to determine the occupational radiation dose received by their employees for whom monitoring was required under 10 CFR 20.1502 during the current year to demonstrate compliance with the occupational dose limits specified in 10 CFR 20.1201. Section 20.2206(a) specifies seven categories of licensees that are required to report occupational radiation dose information to NRC annually and

section 20.2206(b) allows licensees to submit this information in paper format on NRC Form 5, "Occupational Dose Record for a Monitoring Period," or in an equivalent paper or electronic format.

2. Agency Use of Information

NRC compiles and analyzes occupational radiation dose information to assess the effectiveness of licensees' radiation protection programs and uses this information for planning inspections at licensee's facilities. NRC also uses this information to ensure that licensees are complying with the appropriate regulations to protect worker and public health and safety. In addition, NRC publishes NUREG-0713, "Occupational Radiation Exposure at Commercial Nuclear Power Reactors and Other Facilities," annually, to provide the public and other agency stakeholders with information regarding routine occupational radiation exposures to radiation and radioactive material that occur in connection with certain NRC-licensed activities.

In addition, the information supplied on NRC Form 5 "Occupational Dose Record for a Monitoring Period" is used to generate the NRC Form 4, "Cumulative Occupational Dose History," is a summation of an individual's occupational exposure. 10 CFR Part 20.2104(d) requires licensees to record an individual's prior occupational dose on an NRC Form 4, or its equivalent, and this record must show each period in which the individual received occupational exposure to radiation or radioactive material and must be signed by the individual who received the exposure.

3. Reduction of Burden Through Information Technology

There are no legal obstacles to reducing the burden associated with this information collection. The NRC encourages respondents to use information technology when it would be beneficial to them. It is estimated that approximately 98% of the potential responses are filed electronically. This estimate is based on 2015 calendar year data¹ and staff experience. NRC staff does not anticipate that the percentage of electronic submissions will change during the upcoming clearance period.

Regulatory Guide 8.7, Revision 3, (November 2016), "Instructions for Recording and Reporting Occupational Radiation Dose Data," provides licensees with guidance regarding the recommended format for both paper and electronic submission of occupational radiation dose data. The electronic reporting guidance provided in this document is intended to reduce the reporting burden on licensees. The NRC has developed a software tool to allow licensees to review their electronic data files prior to submitting the data to the NRC. The software can be downloaded at no cost to licensees from the NRC's REIRS Web site at www.reirs.com. REIRView Validation software validates the data and format in accordance with the current regulatory guidance. The software also allows the licensees to review all errors and warnings identified in the submittal and view a

¹ In total, NRC received **183,629** electronic records and **2,980** paper records for the 2015 calendar year from NRC licensees required to report occupational dose data pursuant to 10 CFR 20.2206(c).

summary of the data to verify dose distribution and totals. Once verified, the licensee may submit the file using the secure File Submission web page. The File Submission web page allows licensees to electronically submit their files through an encrypted file submission system. The web portal meets all cyber security requirements to protect Personally Identifiable Information (PII) as defined by the National Institute of Standards and Technology (NIST) publication 800-122.

Section 20.2206(c) requires licensees to submit their occupational radiation dose data, covering the preceding year, to NRC, on or before April 30 of each year.

4. Effort to Identify Duplication and Use Similar Information

No sources of similar information are available. There is no duplication of requirements.

5. Effort to Reduce Small Business Burden

NRC provides REIRView, a dose record data validation software, at no cost to licensees. REIRView assists in verification of file format of annual dose records submitted to the REIRS system. NRC also supports the secure File Submission Web page. Both of these are found on the REIRS Web site at www.reirs.com.

6. Consequences to Federal Program Activities if the Collection is Not Conducted or is Conducted Less Frequently

If the requirements of Section 20.2206(c) were not met by licensees, or if the collection was conducted less frequently than on an annual basis, NRC would not receive information about the radiation exposures received by occupational workers at NRC-licensed facilities. As previously mentioned, 10 CFR 20.2206 is the only regulation that requires licensees to submit occupational radiation exposure information to the NRC. NRC uses this information to ensure that occupational radiation workers are receiving occupational radiation doses that comply with the occupational dose limits in 10 CFR 20.1201. If the NRC did not require this information collection, the agency would not be able to communicate with its stakeholders on how licensees' radiation protection programs are working to ensure that radiation exposures to occupational workers, and to the public, are being kept as low as is reasonably achievable (ALARA).

In addition, the REIRS database and NUREG-0713 are the two tools used to identify occupational workers who work at multiple licensees throughout a calendar year and receive occupational radiation doses from multiple licensee facilities. For these types of occupational workers, also known as transient workers, it is important to know their annual occupational radiation doses and ensure that licensees are instituting processes and practices to ensure that these types of workers do not exceed the regulatory occupational dose limits in 10 CFR 20.1201.

7. Circumstances Which Justify Variation from OMB Guidelines

Records associated with the NRC Form 5 must be retained by the licensee for the life of the NRC license in accordance with Section 20.2106(f).

8. Consultations Outside the NRC

Opportunity for public comment on the information collection requirements for this clearance package has been published in the Federal Register on April 7, 2017 (82 FR 17044). NRC contacted four licensees by email and no comments were received.

9. Payment or Gifts to Respondents

Not applicable.

10. Confidentiality of Information

Confidential and proprietary information is protected in accordance with NRC regulations at 10 CFR 9.17(a) and 10 CFR 2.390(b).

NRC Form 5 specifies the use of the individual's name, social security number or other unique identification, date of birth, and sex. This information is necessary to ensure the proper identification of the individual.

In accordance with Section 20.2106(d), NRC Form 5 falls under privacy protection. NRC Form 5 is protected from public disclosure because of the personal information this form requires to identify an individual.

There is a Privacy Act System of Records Notice for the NRC's Radiation Exposure Information and Reporting System (REIRS). The System of Records Notice for REIRS, NRC-27, can be found under <http://www.nrc.gov/reading-rm/foia/privacy-act-records.pdf>.

11. Justification for Sensitive Questions

There are no sensitive questions.

12. Estimate of Annual Burden

Recordkeeping

10 CFR 20.2106 specifies the recordkeeping requirements, recordkeeping frequency, and privacy protection requirements for the licensees that are required to annually submit, either using NRC Form 5 or its equivalent paper or electronic format, occupational radiation exposure data pursuant to 10 CFR 20.2206. It is estimated that approximately 186,000 persons are annually monitored at licensees' facilities and generate approximately 205,920 records. Occupational workers that receive a radiation dose at more than one licensee generate more than one record. Clerical time for recordkeeping is estimated to be 0.58 hours. The annual recordkeeping burden is approximately 119,433 hours (205,920 records x 0.58 hours/record), the annual recordkeeping burden cost is approximately \$31,649,745 (119,433 hours x \$265/hour). (See Table 1)

Reporting

10 CFR 20.2206 specifies seven categories of licensees that are required to annually submit their occupational workers' radiation exposure data. It is estimated that approximately 30 hours is needed to prepare, review, authorize, and submit this information to NRC, using NRC Form 5 or its paper or electronic equivalent. As of June 2016, ~198 licensees submitted occupational radiation exposure information to the NRC. The total reporting burden is 5,940 hours. The total reporting burden for the ~198 licensees is \$1,574,100). (See Table 2)

TOTAL: The total burden costs for recordkeeping and reporting are 125,373 hours at a cost of \$33,223,845.

13. Estimate of Other Additional Cost

In addition to the recordkeeping and reporting burdens, a storage burden is also associated with the information collection of occupational radiation exposure data. The quantity of records to be maintained and stored is roughly proportional to the recordkeeping burden. Based on the number of pages maintained for a typical clearance, records storage costs have been determined to be equal to 0.0004 times the recordkeeping burden cost. The storage cost for this clearance is estimated to be \$12,660 (119,433 hours x 0.0004 x \$265/hour).

14. Estimated Annualized Cost to the NRC

The NRC cost is incurred by inspectors reviewing the information on NRC Form 5, or its equivalent, and supporting records maintained by licensees. Annually, 248 hours of inspection time is spent reviewing such records, at an average of 2.5 hours for each of the 99 active reactor sites and 5 recently shut-down. The annual cost for reactor inspections of NRC Form 5, or its equivalent, is \$65,720 (248 hours x \$265/hour).

The number of operating reactor sites has declined from 104 sites to 99 sites and there are fluctuations in the number of materials licensees. This fluctuation is mainly due to an increase in the number of Agreement States. Agreement States are those States that have entered into formal agreements with NRC, pursuant to Section 274 of the Atomic Energy Act (AEA), to regulate certain quantities of AEA material at facilities located within their borders. There are currently 37 Agreement States. These 37 Agreement States have regulatory authority over approximately 18,900 materials licensees. However, NRC is responsible for conducting inspections of NRC Form 5, or its equivalent, and supporting records maintained by 4,042 materials licensees. It is estimated that approximately 2,021 hours of inspection time is spent reviewing such records at an average of 0.5 hours for each of the 4,042 materials licensees. The annual cost for materials inspectors to review these forms is \$535,565 (2,021 hours x \$265/hour).

Annually the total inspection cost is approximately \$601,285 (\$65,720 for reactor inspections + \$535,565 for materials inspections) (See Table 3). These costs are fully recovered through fee assessments to NRC licensees pursuant to 10 CFR

Parts 170 and 171.

15. Reasons for Change in Burden

There was not a significant change in burden for this renewal. The burden decreased by 5,479 hours from 130,852 hours to 125,373 hours. This decrease is due to the number of operating reactor sites declining from 104 sites to 99 sites and there are fluctuations in the number of materials licensees. The hourly fee rate increased from \$259/hr to \$265/hr.

16. Publication for Statistical Use

Information collected on NRC Form 5 is not published for statistical use.

17. Reason for Not Displaying the Expiration Date

The requirement will be contained in a regulation. The expiration date is displayed on NRC Form 5.

18. Exceptions to the Certification Statement

Not applicable.

B. COLLECTIONS OF INFORMATION EMPLOYING STATISTICAL METHODS

Statistical methods are not employed in the collection of information.

TABLE 1: RECORDKEEPING INFORMATION COLLECTION BURDEN ASSOCIATED WITH NRC FORM 5

NUMBER OF RECORDKEEPERS		NUMBER OF RECORDS/ RECORDKEEPER	NUMBER OF RECORDS	BURDEN HOURS/ RECORD	ANNUAL BURDEN HOURS	ANNUAL COST @ \$265/HOUR
Reactors	99	1865	184,635	0.58	107,088	\$28,378,320
Materials	4,042	5.266	21,285	0.58	12,345	\$3,271,425
Total	4,141		205,920		119,433	\$31,649,745

TABLE 2: REPORTING INFORMATION COLLECTION BURDEN ASSOCIATED WITH NRC FORM 5

		RESPONSES PER RESPONDENT	NUMBER OF RESPONSES	BURDEN PER RESPONSE	ANNUAL BURDEN HOURS	ANNUAL COST @ \$265/HOUR
Reactors	99	1	99	30	2,970	\$787,050
Materials	99	1	99	30	2,970	\$787,050
Total	198		198		5,940	\$1,574,100

Hours: 125,373 hours (5,940 reporting plus 119,433 recordkeeping)

Responses: 4,339 (198 reporting responses plus 4,141 recordkeepers)

Respondents: 4,141 respondents (99 reactors) plus 4,042 materials licensees)

TABLE 3: ESTIMATED ANNUALIZED COST TO THE NRC FOR REVIEW OF REPORTS AND CONDUCT OF INSPECTIONS ASSOCIATED WITH NRC FORM 5

		STAFF HOURS PER LICENSEE	STAFF BURDEN HOURS	ANNUAL COST @ \$265/HOUR
Reactors	99	2.5	248	\$65,720
Materials	4,042	0.5	2,021	\$535,565
Totals	4,141		2,269	\$601,285