

FINAL SUPPORTING STATEMENT  
FOR  
10 CFR PART 19  
"NOTICES, INSTRUCTIONS, AND REPORTS TO WORKERS: INSPECTION  
AND INVESTIGATIONS"  
(OMB Clearance No. 3150-0044)

REVISION REQUEST

DESCRIPTION OF THE INFORMATION COLLECTION

Licenseses are required to instruct workers on matters related to radiological working conditions. This instruction ranges from a tour of the workplace pointing out hazards to a 1-week intensive course on radiation protection involving the preparation of training material. Workers need to be educated about health risks from occupational exposure to radioactive materials or radiation, precautions or procedures to minimize exposure, worker responsibility to report promptly to the Commission any licensee conditions which may lead to or cause a violation of Commission regulations, and the individual radiation exposure reports which are available to them. The licensee is required to control radiation doses to individuals in restricted areas so that, with the exception of planned special exposures under 10 CFR 20.1206, no one receives an annual dose which exceeds the limits established by 10 CFR 20.1201. The annual limit shall be the more limiting of the total effective dose equivalent being equal to 5 rems or the sum of the deep-dose equivalent and the committed dose equivalent to any individual organ or tissue other than the lens of the eye being equal to 50 rems. The annual limit to the lens of the eye is 15 rems, and 50 rems to the skin, or to any extremity.

The individual should be informed of the radiation dose he or she receives because: (a) that information is needed by both a new employer and the individual when the employee changes jobs in the nuclear industry; (b) the individual needs to know the radiation dose received as a result of an accident or incident (if this dose is in excess of the 10 CFR Part 20 limits) so that he or she can seek counseling about future work involving radiation, medical attention, or both, as desired; and (c) since long-term exposure to radiation may be an adverse health factor, the individual needs to know whether the accumulated dose is being controlled within NRC limits. Pursuant to 10 CFR 19.16, a worker may notify the Commission about radiological working conditions he believes are in violation of the Atomic Energy Act, the regulations, or license, and the worker may request an inspection. Upon receipt of such notice, the Commission must determine whether the complaint meets certain requirements specified in 10 CFR Part 19, and either request an inspection or determine that an inspection is not warranted and so notify the complainant in writing.

A. JUSTIFICATION

1. Need for and Practical Utility of the Collection of Information

10 CFR 19.12 requires NRC licensees to give reports to workers as follows: "All individuals who in the course of employment are likely to receive in a year an occupational dose in excess of 100 mrem (1mSv) shall be kept informed of the storage, transfer, or use of radiation and/or radioactive material; instructed in the health protection problems associated with exposure to radiation and/or radioactive material, in precautions or procedures to minimize exposure, and in the purposes and functions of protective devices employed; instructed in, and required to observe, to the extent within the worker's control, the applicable

provisions of Commission regulations and licenses for the protection of personnel from exposure to radiation and/or radioactive material; instructed of their responsibility to report promptly to the licensee any condition which may lead to or cause a violation of Commission regulations and licenses or unnecessary exposure to radiation and/or radioactive material; instructed in the appropriate response to warnings made in the event of any unusual occurrence or malfunction that may involve exposure to radiation and/or radioactive material; and advised as to the radiation exposure reports which workers may request pursuant to § 19.13. The extent of these instructions shall be commensurate with potential radiological health protection problems present in the work place.”

10 CFR 19.13 - "Notifications and Reports to Individuals," requires NRC licensees to give written reports of exposure to radiation as described in the following subsections from that regulation. The records of exposure to radiation referenced by 10 CFR 19.13 are maintained in accordance with the requirements of 10 CFR Part 20.

10 CFR 19.13(a) - “Radiation exposure data for an individual, and the results of any measurements, analyses, and calculations of radioactive material deposited or retained in the body of an individual, shall be reported to the individual. Each notification and report shall: be in writing; include appropriate identifying data such as the name of the licensee, the name of the individual, the individual's social security number; include the individual's exposure information; and contain the following statement:

This report is furnished to you under the provisions of the Nuclear Regulatory Commission regulation 10 CFR Part 19. You should preserve this report for further reference."

10 CFR 19.13(b) - "Each licensee shall advise each worker annually of the worker's dose as shown in records maintained by the licensee pursuant to the provisions of 10 CFR 20.2106 of 10 CFR Part 20."

10 CFR 19.13(c)(1)(i), (ii) and (2) - "At the request of a worker formerly engaged in licensed activities controlled by the licensee, each licensee shall furnish to the worker a report of the worker's exposure to radiation and/or to radioactive material: ...for each year the worker was required to be monitored under the provisions of § 20.1502; and for each year the worker was required to be monitored under the monitoring requirements in effect prior to January 1, 1994. This report must be furnished within 30 days from the time the request is made or within 30 days after the exposure of the individual has been determined by the licensee, whichever is later. This report must cover the period of time that the worker's activities involved exposure to radiation from radioactive material licensed by the Commission and must include the dates and locations of licensed activities in which the worker participated during this period."

10 CFR 19.13(d) - "When a licensee is required pursuant to §§ 20.2202, 20.2203 20.2204, or 20.2206...to report to the Commission any exposure of an individual to radiation or radioactive material, the licensee shall also provide the individual a report on his or her exposure data included therein. This report must be transmitted at a time not later than the transmittal to the Commission."

10 CFR 19.13(e) - "At the request of a worker who is terminating employment with the licensee that involved exposure to radiation or radioactive materials, during the current calendar quarter or the current year, each licensee shall

provide at termination to each worker, or to the worker's designee, a written report regarding the radiation dose received by that worker from operations of the licensee during the current year or fraction thereof. If the most recent individual monitoring results are not available at that time, a written estimate of the dose must be provided together with a clear indication that this is an estimate."

10 CFR 19.16(a) - "Any worker or representative of workers who believes that a violation of the [Atomic Energy] Act, the regulations..., or license conditions exists or has occurred in license activities with regard to radiological working conditions in which the worker is engaged, may request an inspection by giving notice of the alleged violation to the Administrator of the appropriate Commission Regional Office, or to Commission inspectors. Any such notice shall be in writing, shall set forth the specific grounds for the notice, and shall be signed by the worker or representative of workers. A copy shall be provided the licensee by the Regional Office Administrator or the inspector no later than at the time of inspection except that, upon the request of the worker giving such notice, his name and the name of individuals referred to therein shall not appear in such copy or on any record published, released or made available by the Commission, except for good cause shown."

2. Agency Use of the Information

With the exception of 10 CFR 19.12 and 19.16, Part 19 information collections are not provided to the Commission; notices, instructions, and reports required by Part 19 are provided by NRC licensees to individuals participating in licensed activities. Some information collections may require an annual report to the NRC. As stated above, notices received pursuant to 10 CFR 19.16 must be reviewed by the Commission to determine whether the complaint meets certain requirements specified in 10 CFR Part 19. The Commission will then either request an inspection or determine that an inspection is not warranted and so notify the complainant in writing.

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 new automated information technology when it would be beneficial to them. NRC issued a regulation October 10, 2003 (68 FR 58791), consistent with the Government Paperwork Elimination Act, which allows its licensees, vendors, applicants, and members of the public the option to make submissions electronically via CD-ROM, e-mail, special Web-based interface, or other means. Requests which are not for personal records that require verification of identify of the requester are being accepted by electronic mail and facsimile transmission in addition to mail and in-person written requests. It is estimated that approximately 25% of the responses are filed electronically.

Notifications and requests made pursuant to 10 CFR Part 19 must be made in writing. On the average, the NRC receives only one report per year pursuant to 10 CFR Part 19, and this is in response to 10 CFR 19.16. Radiation record information is stored pursuant to 10 CFR Part 20; a majority of licensees currently store these records electronically.

4. Effort to Identify Duplication and Use Similar Information

The collection of the information required is not a duplication of other information.

There is no similar information available to the NRC. Licensees are required to maintain this information by the provisions of 10 CFR Part 20 and to report exposure information to workers pursuant to 10 CFR Part 19. NRC has in place an ongoing program to examine all information collections with the goal of eliminating all duplication and/or unnecessary information collections.

5. Effort to Reduce Small Business Burden

There is no feasible way of reducing the burden on small businesses while still accomplishing the objective of informing individuals of their exposure to radiation. However, the burden is small and should have no significant impact on operating costs.

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

Workers would not be aware of their total radiation dose.

7. Circumstances which Justify Variation from OMB Guidelines

This action does not vary from OMB guidelines.

8. Consultations Outside the NRC

An opportunity to public comment on the Information Collection Requirements for this clearance package was published in the Federal Register on June 14, 2007 (72 FR 32921). No comments were received..

9. Payment or Gift to Respondents

Not applicable.

10. Confidentiality of the Information

Pursuant to 10 CFR 20.2106(d), information on doses to named individuals is protected under the Privacy Act.

11. Justification for Sensitive Questions

Not applicable.

## 12. Estimated Industry Burden and Burden Hour Cost

There are approximately 4,650 licensees in the U.S., subject to the requirements contained in 10 CFR Part 19. Of these 4,650 licensees, approximately 240 licensees are required to report to NRC under 10 CFR 20.2206. The following discussions contain burden estimates for those 240 licensees that are required to report to the NRC. In addition, estimates are provided for the remaining 4,410 licensees that are not required to report to NRC in accordance with 10 CFR 20.2206.

### Section 19.12 Instruction to Workers

There are approximately 4,650 licensees in the U.S. All are required to provide instructions to those who are likely to receive in excess of 100 mrem (1 mSv) occupational dose in a year. The time required to provide instruction to their workers in the areas described in 10 CFR 19.12 can vary depending on the size and type of licensee, and this instruction can range from a tour of the workplace pointing out hazards to a 1-week intensive course on radiation protection. Preparation of the training material and dissemination of periodic updates to 10 CFR 19.12-type instructions are considered to be the paperwork burden involved in meeting the requirements of 10 CFR 19.12. Since preparation of training material is a one-time burden incurred when a licensee first obtains its license, most of the burden associated with the current list of 4,650 licensees has already been incurred and therefore is not applicable for this 3-year clearance period. However, approximately 255 licensees per year of the current list of 4,650 licensees are new licensees and therefore will incur a one-time reporting burden in preparation of training material during this 3-year clearance period. The maximum burden is considered to be 80 hours to prepare a 1-week course using existing instructional materials such as Regulatory Guides 8.13, "Instruction Concerning Prenatal Radiation Exposure," and 8.29, "Instruction Concerning Risks from Occupational Radiation Exposure." Roughly as many as 7 percent of the 255 new licensees (18 licensees) will expend this maximum effort (80 hours x 18 new licensees = 1,440 hours). Roughly 15 percent of the 255 new licensees (38 licensees) will expend 40 hours to develop 2-day courses (40 hours x 38 licensees = 1,520 hours). The remaining balance of 78 percent, approximately 199 licensees, will spend 8 hours to develop basic safety training (8 hours x 199 new licensees = 1,592 hours). Thus, the total annual, one-time burden to comply with the 10 CFR 19.12 requirement to provide initial instruction to workers is estimated at 4,552 hours (1,440 + 1,520 + 1,592). To the extent that licensees utilize the instructional material provided in Regulatory Guides 8.13 and 8.29, this burden is reduced. Therefore, the reporting burden for this section is 4,552 hours.

The dissemination of periodic updates to the information initially provided to workers applies to all 4,650 licensees, which is captured as recordkeeping. Assuming that licensees modify/update the instructions to their workers on the average of once per year and the preparation and dissemination of this material requires approximately 1 hour per licensee, then the total annual burden to prepare and disseminate periodic updates to 10 CFR 19.12-type material is 4,650 hours. Therefore, the total annual burden to comply with the requirements of 10 CFR 19.12 is 9,202 hours (4,552 reporting and 4,650 recordkeeping). The total cost for complying with section 19.12 is \$2,374,116 (9,202 hours x \$258/hr.).

### Section 19.13(b) Annual Reports to Current Employees

Approximately 240 licensees meet the conditions of 10 CFR 20.1502 requiring individual radiation monitoring and are required by 10 CFR 20.2206 to submit annual reports of the results of this monitoring to the NRC. The reporting burden for the annual reports submitted to the NRC for this section is covered under 10 CFR Part 20 (OMB Clearance 3150-0014). The total number of people monitored by these 240 licensees is about 121,000 individuals. These data are based on reports provided by licensees to the NRC in compliance with the reporting requirement of 10 CFR 20.2206, which require approximately 5 minutes to prepare. The compliance burden of 10 CFR 19.13(b) on the population of 240 licensees affected is estimated to be 10,083 hours/year (121,000 reports/year x 5/60 hours/report = 10,083 hours/year).

The other 4,410 licensees required to maintain records of workers advised of dose histories that is not reportable (79,740 individuals), which averages approximately 5 minutes per worker, has an estimated burden of 6,447 hours (79,740 reports/year x 5/60 hours/report = 6,447 hours/year). The total estimated burden for 19.13(b) is 16,530 hours at a cost of \$4,218,300 (16,530 hours x \$258 hour/year).

#### Section 19.13(c) Reports to Former Employees

Approximately 240 licensees are affected by the requirement to provide an NRC Form 5 report to former employees of the total dose received while in the employment of the licensee. Virtually all of these NRC Form 5 reports are prepared by licensees. 10 CFR 20.2104 requires all licensees to determine the occupational dose received during the current year and attempt to obtain the records of cumulative occupational radiation doses. If the new hire cannot provide this information to the licensee, the hiring licensee may attempt to acquire this data by contacting the new employee's previous employer. In most cases, these NRC Form 5 reports are being requested for transient workers (workers who work at more than one NRC-licensed facility during the monitoring year). The recent availability of a nationwide personnel data access system which contains employee dose history information has reduced the number of employee dose history requests that licensees receive to approximately 15% of the total number of reported transient workers in any given year. Approximately 98% of all transient workers are employed by commercial nuclear power plant licensees (which take approximately 10 minutes to respond to requests from prior employees) and the balance of 2% are employed by other licensees (which take approximately 90 minutes to respond to such requests). Therefore, the total burden to the licensee in supplying these NRC Form 5 reports is 1,642 hours/year for commercial nuclear power plant licensees (67,000 reported transient workers/year x 0.15 X 0.98 (percent of transients working for commercial nuclear power plant licensees) = 9,850 reports x 10/60 hour/report = 1,642 hours/year) plus 300 hours/year for other licensees (67,000 reported transient workers/year X 0.15 X 0.02 (percent of transients working at other licensees) = 200 reports X 1.5 hours/report = 300 hours/year).

The total burden for 10 CFR Part 19.13(c) for 240 licensees is estimated to be 1,942 hours/year (1,642 for commercial nuclear power plant licensee plus 300 for other licensees) with an estimated total cost of \$501,036 (1,942 hours x \$258/hr).

#### Section 19.13(d) Reports to Individuals of Exposure Data Contained in Reports to NRC

Section 19.13(d) requires licensees to provide an individual with the same exposure data that licensees are required to send to NRC pursuant to 10 CFR 20.2202, 20.2203, 20.2204 and 20.2206 of 10 CFR Part 20. Sections 20.2202 and 20.2203 require licensees to report to the NRC any incident involving a radiation dose that exceeds NRC limits. Section 20.2204 requires licensees to submit a written report to NRC within 30 days following any planned special exposure, and 10 CFR 20.2206 requires that licensees submit an annual report to NRC of the results of individual monitoring. Since these reports are generated under the requirements of 10 CFR Part 20, there is little additional burden necessary to meet the requirements of 10 CFR Part 19. To satisfy the requirements of 10 CFR Part 19, a copy of the individual's report data from the Part 20 report is provided to the affected individual, requiring less than 5 minutes per report.

Sections 20.2202 and 20.2203 affect approximately 240 licensees. In recent years (since 1998), the number of individuals receiving exposures in excess of regulatory limits has ranged from 1 to 13 persons per year. Assuming that: (1) there is an average of 7 reports per year of personnel receiving exposures in excess of regulatory limits, and (2) that it takes approximately 5 minutes to obtain and send a copy of the individual's report data from the Part 20 report, the total compliance burden of 10 CFR 19.13(d) (for 10 CFR 20.2202 and 20.2203 reports) is estimated to be less than 1 hour per year ( $7 \text{ reports/year} \times 5/60 \text{ hours/report} = 0.58 \text{ hours}$ ).

The reporting burden of 19.13(d) for 10 CFR 20.2204 reports is approximately .25 hours based on an estimated total of 3 reports per year ( $3 \text{ reports/year} \times 5/60 \text{ hours/report} = 0.25 \text{ hours}$ ).

The reporting burden of 10 CFR 19.13(d) for 20.2206 reports is covered by 10 CFR 19.13(b), above. The burden for any additional report required by 10 CFR 19.13(d) is minuscule when compared with the burden for 10 CFR 19.13(b) and (c), as shown above.

#### Section 19.13(e) Report to Terminating Employee

Section 19.13(e) requires that the licensee, at the request of a worker who is terminating employment with the licensee which involved exposure to radiation or radioactive materials, provide a written report to each such worker, at termination, regarding the radiation dose received by the worker.

Most of the requests for dose history reports from workers terminating employment come from transient workers (workers who work at more than one NRC-licensed facility during the monitoring year). Most transient workers work at commercial power reactors. It takes approximately 5 minutes for a commercial reactor licensee to prepare a dose history report for a terminating employee. Therefore, the burden for 10 CFR 19.13 (e) due to transient workers is 5,583 hours/year ( $67,000 \text{ reported transient workers/year} \times 5/60 \text{ hours/report} = 5,583 \text{ hours/year}$ ).

Approximately 15% of the number of monitored workers other than transient workers (14,460 workers) terminate their employment in any given year and request their dose history reports. Since 89% of all monitored individuals work at commercial power reactors, it is assumed that 12,870 ( $14,460 \times 0.89 = 12,870$ ) of

these 14,460 terminating employees work at commercial power reactors. The 12,870 terminating employees at commercial nuclear power reactors requesting reports have an annual burden of 1,073 hours (12,870 power plant employees/year x 5/60 hours/report = 1,073 hours/year).

Of the remaining monitored workers, 1,590 work for non-power plant licensees, which are smaller in size and frequently lack computerized record keeping capabilities, and for these reasons it takes these licensees an estimated 20 minutes to process dose history reports for terminating employees, resulting in an annual burden of 530 hours/years (1,590 non-power plant employees/year x 20 minutes/report = 530 hours/year).

Therefore, the total burden to the licensee in supplying dose history reports to workers who are terminating employment is 7,186 hours/year (5,583 + 1,073 + 530 = 7,186 hours/year).

In addition, the 4,410 licensees that are not required to report to the NRC in accordance with 20.2206, but process dose history reports for their 9,752 terminating employees, have an estimated burden of 813 hours/year (9,752 reports/year x 5/60 hours/report).

Therefore, the total compliance burden for 19.13(e) is 7,999 hours (7,186 hours/year + 813 hours/year). The total cost = \$2,063,742 (7,999 x \$258 hour/year).

#### Section 19.16(a) Requests by Workers for Inspections

Out of 4,650 licensees in the U.S., it is estimated that the Commission receives only one notification/request each year pursuant to 19.16(a). These written requests are expected to take approximately 30 minutes to prepare. Thus, the total annual reporting burden associated with 10 CFR 19.16(a) is estimated to be 30 minutes. The total cost for this section is \$129 (0.5 hours x \$258/hr.).

#### Total Estimate of Annual Industry Burden

The total estimated industry burden is shown on the attached burden tables.

#### 13. Estimate of Other Additional Costs

NRC has determined that the records storage cost is roughly proportional to the recordkeeping burden cost. Based on a typical clearance, the records storage cost has been determined to be equal to 0.04 percent of the recordkeeping burden cost. Therefore, the records storage cost for this clearance is \$3,212 (31,121 hrs x 0.0004 x \$258/hr).

#### 14. Estimated Annualized Cost to the Federal Government

There is no cost to the Federal government except for that involving requests by workers for inspections. Approximately one worker requests an inspection each year pursuant to 10 CFR 19.16. Each request takes an average of 3 hours to resolve. Thus, the estimated annual cost to the Federal government is \$774 (1 report/year x 3 hours/report x \$258 /hour). This cost is fully recovered through fee assessments to NRC licensees pursuant to 10 CFR Parts 170 and/or 171.

15. Reasons for Changes in Burden or Cost

The overall burden remained constant at 35,674 hours. In addition, the number of new licensees remained at 255 and the number of recordkeepers remained at 240. The net result is no change in burden. The reporting burden covers the burden for Section 19.12 (a portion of this section is a one time burden for new licensees); Section 19.13(b), which is covered under 10 CFR Part 20 (OMB Clearance 3150-0014); and Section 19.16(a). The recordkeeping burden now incorporates the third party reporting requirements for Sections 19.12, 19.13(b), 19.13(c), 19.13(d), and 19.13(e). However, there was an increase in professional cost from \$156/hr to \$258/hr.

16. Publication for Statistical Use

NRC does not publish this information for statistical use.

17. Reason for Not Displaying the Expiration Date

The requirement is contained in a regulation. Amending the Code of Federal Regulations to display information that, in an annual publication, could become obsolete would be unduly burdensome and too difficult to keep current.

18. Exceptions to the Certification Statement

Not applicable.

B. COLLECTIONS OF INFORMATION EMPLOYING STATISTICAL METHODS

Not applicable.

TABLE 1 -- ANNUAL REPORTING BURDEN

Section	No. of Respondents	Responses Per Respondent	Total Responses	Burden Per Response	Total Annual Burden	Cost @ \$258/Hr
19.12 (One time)	255	1	255	18 hours	4,552	\$1,174,416
19.13(b)					Covered under 10 CFR Part 20 (3150-0014)	
19.16(a)	1	1	1	.5 hours	1	\$258
Total	256		256		4,553	\$1,174,674

TABLE 2 -- ANNUAL RECORDKEEPING BURDEN

Section	Number of Recordkeepers	Hours Per Recordkeeper	Total Annual Burden Hours	Cost @ \$258/Hr
19.12	4,650	1.00	4,650	\$1,199,700
19.13(b) (Monitored Reportable Workers)	240	42.01	10,083	\$2,601,414
19.13(b) (Non-reportable) (hospital workers)	4,410	1.462	6,447	\$1,663,326
19.13(c) (Commercial Transient Workers)	100	16.42	1,642	\$423,636
19.13(c) (Other licensee Transient Workers)	140	2.14	300	\$77,400
19.13(d) (Covered in Section 19.13(b))				
19.13(e) (Commercial Transient Workers)	240	23.262	5,583	\$1,440,414
19.13(e) (Commercial Terminating Workers)	240	4.470	1,073	\$276,834
19.13(e) (Other licensee Terminating Workers)	240	2.210	530	\$136,740
19.13(e) (Non-reportable Terminating Workers)	4,410	0.184	813	\$209,754
Total	4,650		31,121	\$8,029,218

Total estimated reporting burden is 4,553 hours and a total cost of \$1,174,674.

Total estimated recordkeeping burden is 31,121 hours and a total cost of \$8,029,218.

The overall estimated burden is 35,674 hours and a total cost of \$9,203,892.