

DRAFT SUPPORTING STATEMENT FOR PROPOSED RULE
10 CFR PART 73
PHYSICAL PROTECTION OF IRRADIATED REACTOR FUEL IN TRANSIT
(3150-0002)

REVISION

Description of the Information Collection

The U.S. Nuclear Regulatory Commission (NRC) regulations in 10 CFR Part 73 prescribe requirements for the establishment and maintenance of a system for physical protection of special nuclear material (SNM) at fixed sites, SNM in transit, including spent nuclear fuel (SNF), and of plants in which SNM is utilized. The regulations are issued pursuant to the Atomic Energy Act of 1954, as amended, and Title II of the Energy Reorganization Act of 1974, as amended. 10 CFR Part 73 contains reporting and recordkeeping requirements which are necessary to help ensure that an adequate level of protection is provided for nuclear facilities and nuclear material. This proposed rule requires revisions to Information Collections contained in OMB Clearance 3150-0002, which was approved by OMB on June 22, 2008.

After the attacks of September 11, 2001, the NRC determined that additional security measures were needed to enhance the protection of SNF shipments from theft, diversion, or radiological sabotage. On October 3, 2002, the NRC began issuing orders to select licensees. The orders were issued to licensees who had shipped or received SNF during the period 1999 through 2002 and who expected to ship or receive by June 2004. Since 2002, orders have been issued only to licensees that have given NRC advance notification of a SNF shipment.

The current regulations require a licensee to implement a physical protection program during the transport of SNF to minimize the risk of radiological sabotage and to ensure swift recovery following the theft, diversion, or radiological sabotage of a shipment. Although these regulations provide adequate protection of SNF shipments, the NRC determined that further security enhancements were needed. For example, the existing regulations in 10 CFR 73.37 require armed escorts in heavily populated areas but not for other areas along the route. This relaxation of security in less populated areas creates vulnerability. An adversary could take control of the shipment in an unpopulated area and move it to a population center for a radiological sabotage event.

In addition, the rulemaking considers the State of Nevada on June 22, 1999-Petition for Rulemaking (PRM-73-10). The Petition requested that the NRC initiate rulemaking to strengthen its regulations governing safeguards for shipments of SNF against sabotage and terrorism. The State cited significant changes in the threat environment since the development of the § 73.37 as a part of the basis of their request. Some aspects of the Petition will be addressed by this rulemaking effort. The proposed rule also considered information gathered by staff during the implementation and inspection of the past orders and insights gained since the events of September 11, 2001.

The Section 73.37, "Requirements for Physical Protection of Irradiated Reactor Fuel in Transit," were established on June 15, 1979 (44 FR 34466). By the promulgation of these regulations the NRC recognized that a licensee's loss of control of SNF, whether inadvertent or through a deliberate act, could threaten public health and safety, the environment, or the common defense and security of the United States. There has been no significant update of these regulations in almost 30-years.

The § 73.37 regulations require licensees to put in place a physical protection system for spent fuel shipments that meet the objectives to: (1) minimize the possibilities for radiological sabotage of spent fuel shipments especially within heavily populated areas, and (2) facilitate the location and recovery of SNF shipments that may have come under the control of unauthorized persons. It also provides for: (1) early detection and assessment of attempts to gain unauthorized access to, or control over, spent fuel shipments, (2) notification to the appropriate response forces of any sabotage events, and (3) the impeding of attempts at radiological sabotage of SNF shipments in heavily populated areas or attempts to illicitly move such shipments into heavily populated area.

The NRC issued EA -02-109, "Issuance of Order for Interim Safeguards and Security Compensatory Measures for the Transportation of Spent Nuclear Fuel Greater than 100 Grams" on October 3, 2002. The orders were issued to licensees who had shipped or received SNF within 3-years and who planned to ship or receive SNF in the foreseeable future. The specifics of the orders are protected as SGI, as such; their details cannot be discussed in this document. In general, the security requirements resulted in enhancements in the following areas: preplanning and coordination with States and local law enforcement agencies; improved communications among movement control personnel; the development of normal and contingency procedures; a minimum number of weapons for escorts and more thorough background investigations of individuals associated with the spent fuel shipment.

The NRC's objectives for the rulemaking are to establish and update generically applicable security requirements similar to those previously imposed by the NRC orders issued after the terrorist attacks of September 11, 2001. The rulemaking adds new requirements, not derived directly from the Order requirements that were developed as a result of insights gained from implementation of the security orders. In addition, the proposed revisions will reorganize § 73.37 in a more logical, step-by-step approach that is more user-friendly. Finally, it addresses and considers the Nevada Petition.

A. JUSTIFICATION

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

In general, the reports, third party notification and records are necessary for one or more of the following reasons:

- Information describing the content and planned operation of the licensee's physical protection system (e.g., Security Plan, Contingency Plan, or Training and Qualification Plan). This information is essential to enable the NRC to make a determination about the adequacy of the licensee's planned system in meeting regulatory requirements.
- Information describing the normal operation of the physical protection system (e.g., access authorizations, equipment performance logs). This information is needed to permit the NRC to make a determination as to reasonable assurance that the physical protection system operates in accordance with the regulatory requirements.
- Information notifying the NRC of the occurrence of and circumstances surrounding abnormal events (e.g., report of theft, sabotage, or overdue shipment). This information is needed to enable the NRC to fulfill its responsibilities to respond to, investigate, and correct situations which adversely affect public health and safety or the common defense and security.

Specific requirements for reports and records in the proposed amendments to 10 CFR Part 73.37 are identified below:

73.37 Requirements for physical protection of irradiated reactor fuel in transit.

Section 73.37(b)(1)(iv) requires licensees to Preplan and Coordinate SNF with the governor of a State, or the governor's designee, of a shipment of SNF through, or across their boundary, the NRC estimates on average each shipment will cross the border into five states. This is a new requirement.

Section 73.37(b)(1)(vi) requires licensees to Preplan and coordinate with the NRC to obtain advance approval of the routes used for road and rail shipments of SNF, and of any U.S. ports where vessels carrying spent fuel shipments are scheduled to stop. This is a new requirement.

Section 73.37(b)(2)(i-iii) incorporates the existing advance notification requirements in §§ 73.37(f)(1)-(3). As currently required in §§ 73.37(f)(1)-(3), the proposed § 73.37(b)(2)(i-iii) would require licensees to notify State(s) prior to the shipment of SNF within or through a State or, prior to the delivery to a carrier for transport of the licensed material outside the confines of the licensee's facility or other place of use or storage.

Section 73.37(b)(2)(iv) incorporates the existing advance notification revision requirements in § 73.37(f)(4). As currently required in § 73.37(f)(4) the proposed § 73.37(b)(2)(iv) requires a licensee shall notify by telephone a responsible individual in the office of the governor or in the office of the governor's designee of any schedule change that differs by more than 6 hours from the schedule information previously furnished in accordance with the proposed § 73.37(b)(2)(iii), and shall inform that individual of the number of hours of advance or delay relative to the written schedule information previously furnished.

Section 73.37(b)(2)(v) requires licensees for Cancellation notices. Each licensee who cancels a shipment for which advance notification has been sent shall send a cancellation notice to the governor or to the governor's designee of each State previously notified and to the NRC's Director, Division of Security Policy, Office of Nuclear Security and Incident Response. The licensee shall state in the notice that it is a cancellation and identify the advance notification that is being canceled. The NRC estimates that one shipment will be canceled over a three year period (60 total shipments in three years). This is a new requirement.

Section 73.37(b)(2)(vi) requires licensees to retain a copy of the preplanning and coordination activities, advance notification, and any revision or cancellation notice as a record for 3 years. This is a new requirement.

Section 73.37(b)(3)(iv) the movement control center personnel and escorts will maintain a written log for each spent fuel shipment, which will include information describing the shipment and significant events that occur during the shipment. The log will be available for review by authorized NRC personnel for a period of at least 3 years following completion of the shipment.

Section 73.37(b)(3)(v) the licensee shall report safeguards events in accordance with § 73.71.

Section 73.37(b)(3)(vi) the licensee shall retain as a record the transportation physical protection procedures for three years after the close of period for which the licensee possesses the special nuclear material. If any portion of the procedure is superseded, retain the superseded material for three years after each change.

Section 73.37(b)(3)(vii)(B) and (C) the transportation physical protection system provide that shipment escorts make calls to the movement control center at random intervals, not to exceed 2 hours, to advise of the status of the shipment for road and rail shipments, and for sea shipments while shipment vessels are docked at U.S. ports. (C) Provide that at least one armed escort remains alert at all times, maintain constant visual surveillance of the shipment, and periodically reports to the movement control center at regular pre-set intervals during periods when the shipment vehicle is stopped, or the shipment vessel is docked.

Section 73.37(b)(4)(iii) the licensee shall retain the contingency and response procedures as a record for three years after the close of period for which the licensee possesses the special nuclear material under each license for which the plan is used and superseded material for three years after each change.-

Section 73.37(f) each licensee who makes arrangements for the shipment of spent nuclear fuel shall immediately conduct an investigation, in coordination with the receiving licensee, of any shipment that is lost or unaccounted for after the designated no-later-than arrival time in the advance notification.

Section 73.38(d) requires the licensee to conduct background investigations before allowing an individual to act as an armed escort or have unescorted access to spent reactor fuel in transit. This is a new requirement.

Section 73.38(d)(3) requires the licensee to do fingerprinting and an FBI investigation and criminal history records check in accordance with Part 73.57. This requires the licensee to transmit the fingerprints to the NRC. This is a new requirement.

Section 73.38(i) requires the licensee to maintain records of background investigations 5 years from the date the individual no longer requires access to spent nuclear fuel. This section also requires a copy of the access authorization program procedures as a record for 5 years after it is no longer needed. In addition, the licensee must retain the list of persons approved for unescorted access for 5 years after the list is superseded or replaced. This is a new requirement.

Section 73.72(a)(4) requires The NRC Headquarters Operations Center shall be notified about the shipment status by secured telephone at the phone numbers listed in appendix A to this part. Classified notifications shall be made by secure telephone. The notifications shall take place at the following intervals

- (i) At least 2 days before commencement of the shipment (existing);
- (ii) Two hours before commencement of the shipment (new); and
- (iii) Once the shipment is received at its destination. (new).

Section 73.72(a)(5) requires the NRC Headquarters Operations Center shall be notified by telephone of schedule changes more than 6 hours at the numbers listed in appendix A to this part.

Section 73.72(b) a licensee who conducts an onsite transfer of spent fuel that does not travel upon or cross a public highway is exempt from the requirements of this section for that transfer. The NRC does not anticipate any onsite transfers crossing public highways.

2. Agency Use of Information

The information collected is reviewed by the NRC staff to assess the adequacy of the licensees' ability to implement and execute a physical protection program during the transport of SNF. The NRC will ensure that the physical protection program is in compliance with proposed regulations and ensures swift recovery following the theft, diversion, or radiological sabotage of a shipment.

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. NRC issued a regulation on 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. It is estimated that approximately 2% of the potential responses are filed electronically.

4. Effort to Identify Duplication and Use Similar Information

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

Since the consequences to the common defense and security are the same for large and small entities, it is not possible to reduce the burden on small businesses by less frequent or less complete reports, records, plans, and procedures. However, no small entities are expected to be impacted by the proposed rule.

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

If the information collection was not conducted or was conducted less frequently, the NRC would not be notified in time to provide rapid response and quick assistance in achieving timely resolution of safeguards events. Reports are submitted and evaluated as events occur. Thus, if this information is not collected, there is a high probability that adverse impacts on the public health and safety and the common defense and security could occur.

7. Circumstances Which Justify Variation from OMB Guidelines

Certain sections of Part 73 vary from the OMB Guidelines by requiring that licensees submit reports to the NRC in less than 30 days. Section, 73.37 and 73.71 require immediate notifications to response forces, NRC, and local law enforcement authorities, communications between convoys and movement control centers, and immediate notifications of consignees and shippers. These notification requirements are needed to promptly engage response forces, NRC, law enforcement authorities, shippers, and consignees to confirm the integrity of shipments or to determine whether there has been a theft, or diversion of SNF and to initiate prompt action for recovery of such material. They also mitigate the

occurrence of radiological sabotage.

Certain other sections of Part 73 vary from the OMB Guidelines by requiring that licensees retain records for more than 3 years. Section 73.38(b)(5) requires retention of records for 5 years or for extended periods such as duration of possession of the material, duration of employment, or 5 years after termination of access authorization. These requirements are necessary to ensure that procedures for handling and safeguarding nuclear materials are available throughout the period in which the licensee possesses the material or operates the facility. Other records are required for inspection or for reconstruction of events in the event of a safeguards incident.

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.

9. Payment or Gift 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).

11. Justification for Sensitive Questions

Not applicable.

12. Estimated Burden and Burden Hour Cost

The NRC estimates the potential impacted "universe" of respondents for this proposed rule will consist of Commercial Power Reactors Sites, Decommissioning Reactor Sites, Research and Test Reactors (RTRs), Independent Spent Fuel Storage Installations (ISFSI) and a number of Part 70 licensees resulting in an estimated "universe" of 125 licensees. In addition, the NRC estimates that there will be 10 shipments by highway along with 10 shipments by rail for a total of 20 shipments annually. Two licensees will ship on average twice a year and sixteen additional licensees will have one annual shipment. This proposed rule will impose the following new information collections requirements:

- Section 73.37(b)(1)(iv) is a new third party notification requirement to the impacted states of 3 hours per each state and 100 total states notified for the 20 shipments. Although 20 shipments are expected, two of these 18 will ship twice for a total of 20 annual shipments. This is an annual burden of 300 hours.
- Section 73.37 (b)(1)(vi) is a new reporting requirements on the pre-planning coordination with the NRC. This is estimated to be 25 hours per shipment for a total new reporting burden of 500 hours annually.
- Section 73.37(b)(2)(i-iii) is a new third party and reporting requirement on the written advance notification to the NRC and States. Each of the estimated 20 shipments per year will require written notification to an average of five states

and to the NRC. This will require a total of 120 written notifications with each notification estimated to take 30 minutes, for a total of 60 hours of annual burden.

- Section 73.37(b)(2)(v) is a new requirement that the licensees contact the NRC and impacted states of any canceled shipments. The NRC expects this to be a rare occurrence. However, a local or national emergency, i.e., Hurricane Katrina or 9-11 events, may require cancellation of a previously approved shipment. The NRC estimates this additional burden to be 2 hour annually.
- Section 73.37(b)(2)(vi) places a new recordkeeping requirement on the pre-planning, revisions, background investigations and required notifications. The NRC estimates this additional burden to be 60 hours annually.
- Section 73.38(d) is a new reporting requirement for licensees to conduct background investigations before allowing an individual to act as an armed escort or have unescorted access to spent reactor fuel in transit. The NRC estimates it will take 6 hours for the individual to complete the paperwork. The NRC estimates that each of the 18 licensees will experience turnover requiring 1 new background investigations annually for a total of 18 background investigations each year. The total annual burden will be 108 hours.
- Section 73.38(d)(3) is a new reporting requirement for the licensee to transmit the fingerprints to the NRC. It is estimated to take 15 minutes to transmit each of the 18 fingerprint packages to the NRC for a total of 4.5 hours annually.
- Section 73.38(b)(5) is a new recordkeeping requirement for the licensee to maintain records on the background investigations for 5 years from the date the individual no longer requires access to spent nuclear fuel. It is estimated to take 5.5 hours annually for the licensees to maintain these records.
- Section 73.72(a)(4)(i)-(iii) is a new reporting requirement for licensees on notification on 2 days, 2 hours and upon arrival. The NRC estimates that the 60 new notification requirements will take 18 minutes each. This is an annual burden of 18 hours.
- Section 73.72(b) a licensee who conducts an onsite transfer of spent fuel that does not travel upon or cross a public highway is exempt from the requirements of this section for that transfer. The NRC does not anticipate any onsite transfers crossing public highways for 0 annual burden hours.

The total annual burden for this proposed rule is 1,058 hours (641 reporting hours+ 65.5 recordkeeping hours + 352 third party hours).

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 recordkeeping storage cost has been estimated to be equal to .0004 percent of the recordkeeping burden. Therefore, the additional recordkeeping storage cost for the proposed rule is estimated to be \$6.73 (65.5 recordkeeping hours x \$257 x .0004).

14. Estimated Annualized Cost to the Federal Government

This section calculates the estimated annualized cost to the government over the three-year period covered by the analysis, including both one-time costs and annual costs. There are no estimated one-time cost to the government for review of required reports and records. The NRC does estimate the burden amounts to \$154,200 (600 hours per year at \$257/hr). The cost is fully recovered by license fee assessments to NRC licensees pursuant to 10 CFR Parts 170 and/or 171.

15. Reasons for Change in Burden or Cost

After the attacks of September 11, 2001, the NRC reevaluated its security requirements for SNF in transit. From this effort, additional measures were identified that would improve security. The additional security measures deemed immediately necessary were issued as orders and supplemented existing regulations. The proposed revisions of the regulations are based on the NRC efforts undertaken since the events of September 11, 2001, including issuance of additional security requirements by orders, and insights gained from implementation of the orders.

The proposed rule will increase the reporting, recordkeeping, and third party notification requirements by 1,058 hours from 1,005,313 to 1,006,371.

Section 73.37(b)(1)(iv) is a new third party notification requirement to the impacted states. It requires licensees to Preplan and Coordinate SNF with the governor of a State, or the governor's designee, of a shipment of SNF through, or across their boundary. The NRC estimates on average each shipment will cross the border into five states. This is a new requirement with a burden of 3 hours per each state, there are a total of 100 I states who will be notified for the 20 shipments. This is an annual burden of 300 hours.

Section 73.37 (b)(1)(vi) is a new reporting requirements on the pre-planning coordination with the NRC. It requires licensees to Preplan and coordinate with the NRC to obtain advance approval of the routes used for road and rail shipments of SNF, and of any U.S. ports where vessels carrying spent fuel shipments are scheduled to stop. This is estimated to be 25 hours per shipment for a total new reporting burden of 500 hours annually.

Section 73.37 (b)(2)(i-iii) is a new third party notification and reporting requirement for the advance written notification to the NRC and the States. It requires the written advance notification to the NRC and States of the estimated 20 shipments per year to an average of five states and to the NRC. This will require a total of 120 written notifications with each notification estimated to take 30 minutes, for a total of 60 hours of annual burden. The NRC estimates this to be a total of 60 hours of annual burden.

Section 73.37(b)(2)(vi) places a new recordkeeping requirement on the pre-planning, and required notifications. It requires licensees to retain a copy of the preplanning and coordination activities, advance notification, and any revision or cancellation notice as a record for 3 years. The NRC estimates this additional burden to be 60 hours annually.

Section 73.38(d) places a new reporting requirement for licensees to conduct background investigations before allowing an individual to act as an armed escort or have unescorted access to spent reactor fuel in transit. The NRC estimates it will take 6 hours for the individual to complete the paperwork. The NRC estimates that each of the 18 licensees will experience turnover requiring 1 new background investigations annually for a total of 18 background investigations each year. The NRC estimates this additional burden to be 108 hours annually.

Sections 73.37(b)(2)(v), 73.38(a)(1), 73.38(b)(5), 73.72(a)(4)(i)-(iii), and 73.72(b) are new recordkeeping and reporting requirement for licensees that require

minimum burden changes. These sections require the licensee to maintain records of background investigations 5 years from the date the individual no longer requires access to spent nuclear fuel. They also require a copy of the access authorization program procedures as a record for 5 years after it is no longer needed. In addition, the licensee must retain the list of persons approved for unescorted access for 5 years after the list is superseded or replaced.

The total annual burden for this proposed rule is 1,058 (641 reporting hours+ 65.5 recordkeeping hours + 352 third party hours). The total annualized burden cost for this proposed rule is \$271,901.

16. Publication for Statistical Use

None.

17. Reason for Not Displaying the Expiration Date

The requirements are 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

None.

B. COLLECTIONS OF INFORMATION EMPLOYING STATISTICAL METHODS

Not Applicable.

TABLE 1

ANNUALIZED REPORTING BURDEN, 10 CFR PART 73

Section	No. Of Respondents	Responses per Respondent	Total No. of Annual Responses	Burden Hours per Response	Total Annual Reporting Burden (Hrs)	Total Labor cost (\$257) per hour
73.37(b)(1)(vi)	18	1.11	20	25	500	\$128,500
73.37(b)(2)(i-iii)	18	1.11	20	0.5	10	\$2,570
73.37(b)(2)(v)	1	1	1	0.33	0.33	\$85
73.38(d)	18	1	18	6.00	108	\$27,756
73.38(d)(3)	18	1	18	0.25	5	\$1,157
73.72(a)(4)(i)-(iii)	18	3.33	60	0.30	18	\$4,626
73.72(b)	18	0	0	0.25	0	\$0
Total	18		137		641.33	\$164,693

TABLE 2

ANNUALIZED THIRD PARTY REPORTING BURDEN, 10 CFR PART 73

Section	No. Of Respondents	Responses per Respondent	Total No. of Annual Responses	Burden Hours per Response	Total Annual Reporting Burden (Hrs)	Total Labor cost (\$257) per hour
73.37(b)(1)(iv)	18	5.55	100	3	300	\$77,100
73.37(b)(2)(i-iii)	18	5.56	100	0.5	50	\$12,850
73.37(b)(2)(v)	1	5	5	0.33	1.65	\$424
Total	18		205		351.65	\$90,374

TABLE 3

ANNUALIZED RECORDKEEPING BURDEN, 10 CFR PART 73

Section	No. Of Recordkeepers	No of Records per Recordkeeper	Hours per Record	Total Annual Reporting Burden (Hrs)	Total Labor cost (\$257) per hour
73.37(b)(2)(vi)	18	1.11	3	60	\$15,420
73.38(a)(2)	18	1	0.275	5.5	\$1,414
Total	18			65.5	\$16,834

Total Burden Hours	1058
Total Burden Hour Cost	\$271,901
Annual Respondents	18
Total Responses	360

