

FINAL SUPPORTING STATEMENT  
FOR  
10 CFR PART 72  
LICENSING REQUIREMENTS FOR THE INDEPENDENT STORAGE OF  
SPENT NUCLEAR FUEL AND HIGH-LEVEL RADIOACTIVE WASTE  
(3150-0132)  
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EXTENSION

Description of the Information Collection

The Nuclear Regulatory Commission (NRC) regulations in 10 CFR Part 72 establish requirements, procedures, and criteria for the issuance of licenses to receive, transfer, and possess power reactor spent fuel and other radioactive materials associated with spent fuel storage in an independent spent fuel storage installation (ISFSI). The regulations also establish requirements, procedures and criteria for the issuance of licenses to the Department of Energy (DOE) to receive, transfer, package, and possess power reactor spent fuel, high-level radioactive waste, power reactor-related greater than Class C (GTCC) waste, and other radioactive materials associated with spent fuel and high-level radioactive waste storage in a monitored retrievable storage (MRS) installation.

Currently, there are 78 licensees (63 general licensees and 15 specific licensees) and 4 certificate holders. Licensees are defined as “a company, organization, institution, or other entity to which the NRC or an Agreement State has granted a general license or specific license to construct or operate a nuclear facility, or to receive, possess, use, transfer, or dispose of source material, byproduct material, or special nuclear material.” Certificate holders are those persons who have been issued a Certificate of Compliance by the Commission that approves the design of a spent fuel storage cask. Under 10 CFR Part 72, the licensees and Certificate of Compliance (CoC) holders submit applications for license amendments (specific or general), updates to safety analysis reports (SARs), cask registrations, fluent reporting requirements, and physical security plans.

These licensees and CoC holders keep records including: records that need to be retained, information important to the decommissioning of a facility, changes in the facility or spent fuel storage cask design, of changes in procedures, and of tests and experiments, and records showing the receipt, inventory (including location), disposal, acquisition, and special nuclear material (SNM) and source material, authorization of the receipt, handling, and storage of spent fuel, high-level radioactive waste and/or reactor-related GTCC waste, and written material control and accounting procedures. In regards to labeling requirements, 72.236(k) requires that a spent fuel storage cask must be conspicuously and durably marked with a model number, a unique identification number, and an empty weight.

A. JUSTIFICATION

1. Need for and Practical Utility of the Information Collection

The regulations in 10 CFR Part 72 are issued pursuant to the Atomic Energy Act of 1954, as amended, Title II of the Energy Reorganization Act of 1974, as amended, and the Nuclear Waste Policy Act of 1982, as amended. In order to obtain a license under 10 CFR Part 72,

an applicant must submit financial, safeguards, technical, and environmental information. Such information is needed both to provide safety assurance and to comply with complementary NRC regulations for environmental protection (10 CFR Part 51) and safeguards requirements (10 CFR Part 73). A full description of the specific information collections in Part 72 is located in Appendix A of this document.

2. Agency Use of Information

The information included in the applications, reports and records is reviewed by the NRC staff to ensure the provision of an adequate level of protection of public health and safety, common defense and security, and the environment.

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.

The NRC has issued Guidance for Electronic Submissions to the NRC which provides direction for the electronic transmission and submittal of documents to the NRC. Electronic transmission and submittal of documents can be accomplished via the following avenues: the Electronic Information Exchange (EIE) process, which is available from the NRC's "Electronic Submittals" Web page, by Optical Storage Media (OSM) (e.g. CD-ROM, DVD), by facsimile or by e-mail. However, because of the types of information (e.g., engineering analyses unique to each licensee) and the infrequency of submission, the applications and other reports do not lend themselves readily to the use of automated information technology for submission. Based on estimates provided by NRC licensing staff for recent submittals, it is estimated that approximately 10 percent of the potential responses are filed electronically.

4. Effort to Identify Duplication and Use Similar Information

In general, information required by NRC in applications, reports, or records concerning the transfer, receipt, possession, or use of nuclear material does not duplicate other Federal information collection requirements and is not available from any source. Section 72.18 specifically provides an opportunity for the applicant to avoid repetition in filing licensing submittals. The applicant may incorporate by reference information contained in previous applications, statements, or reports filed with the Commission, provided that such references are clear and specific.

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

5. Effort to Reduce Small Business Burden

The affected entities are not small businesses.

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

Conduct of this collection of information at the required frequency is essential to the assurance of protection of the health and safety of workers and the public. Applications are only required to be submitted for the initial license or certificate, amendments, and for renewals every 40 years, with the final rule on certificate terms and conditions becoming effective May 21, 2011. The application process requires that applicants and licensees perform comprehensive safety and environmental reviews to assure that all activities will be or are being conducted safely and in accordance with NRC regulations. The review and submission of the information required for the application is essential to NRC's determination of whether the applicant has training, experience, equipment, facilities and procedures adequate to protect the public health and safety and the environment. Other reporting and recordkeeping requirements are occasioned by specific events such as tests and experiments, annual environmental reporting, and transfers and inventories of licensed material.

#### 7. Circumstances Which Justify Variation from OMB Guidelines

Certain sections of Part 72 vary from the OMB Guidelines by requiring that licensees submit reports to the NRC in less than 30 days:

- 10 CFR 72.11 requires that licensees submit a notification to NRC within two working days from the date of identifying information having significant implications for the public health and safety or the common defense and security and which is not covered by other reporting requirements. The requirement to provide notification within two working days following the identification of the information is necessary to ensure that NRC is made aware of the significant safety information so as to take prompt effective action to protect the public health and safety and common defense and security.
- 10 CFR 72.44(b)(6) requires that licensees submit a notification to NRC in less than 30 days from the date of filing of a petition for bankruptcy. The requirement to provide notification immediately following the filing of the petition is necessary to ensure that NRC is made aware of the bankruptcy so as to take effective action to protect the public health and safety. Allowing a period of 30 or more days to elapse might preclude NRC from becoming aware of the licensee's distressed financial circumstances in time to prevent the development or aggravation of a potential hazard to the public. Moreover, the United States Code contains requirements regarding notification of creditors in bankruptcy. Section 72.44(b)(6) would require one additional notification. Notifying NRC promptly after the filing of the petition would in fact be less of a burden on the bankrupt than a separate notification later in the proceedings.
- 10 CFR 72.74 requires that a licensee report an accidental criticality or any loss of special nuclear material to the NRC Operations Center by the Emergency Notification System or by telephone within 1 hour. This immediate notification is necessary to promptly inform NRC of particularly serious maloperations or accidents, and is evaluated by NRC to determine whether any immediate response or corrective action may be necessary.

- 10 CFR 72.75(a) requires the licensee to notify the NRC Operations Center within 1 hour after the declaration of an emergency. This immediate notification is necessary to permit NRC to determine whether immediate response or corrective action is needed to protect public health and safety.
- 10 CFR 72.75(b) requires each licensee to notify the NRC as soon as possible, but no later than 4 hours after the discovery of any of the following events or conditions involving spent fuel, HLW, or reactor related GTCC waste: (1) any action taken in an emergency that departs from a condition or a technical specification contained in a license or a CoC issued under Part 72 when the action is immediately needed to protect the public health and safety and no action consistent with the license or CoC conditions or technical specifications that can provide adequate or equivalent protection is immediately apparent; and (2) any event or situation related to the health and safety of the public or onsite personnel, or protection of the environment, for which a news release is planned or notification to other government agencies has been or will be made. Such an event may include an onsite fatality or inadvertent release of radioactively contaminated materials. This requirement is consistent with the requirement in 10 CFR 50.72(b)(2)(xi) for reactor facilities. Reports of these events are needed promptly because they may involve events that require the NRC to respond to heightened public concerns. The prompt notification is necessary to permit NRC to determine whether immediate response or corrective action is needed to protect public health and safety.
- 10 CFR 72.75(c) requires that licensees notify the NRC as soon as possible but no later than 8 hours after the discovery of the following events or conditions involving spent fuel, HLW, or GTCC waste: (1) a defect in any spent fuel storage structure, system, or component that is important to safety; (2) a significant reduction in the effectiveness of any spent fuel storage confinement system during use consistent with the time that information is needed for NRC action; (3) an event that requires the transport of a radioactively contaminated person to an offsite medical facility for treatment. The prompt notification is necessary to permit NRC to determine whether immediate response or corrective action is necessary to protect public health and safety and to determine whether patterns exist that might indicate poor design, fabrication, or operation requiring corrective action.
- 10 CFR 72.75(d) requires that licensees notify the NRC within 24 hours for certain specified events in which safety equipment is disabled or fails to function as designed, when (i) the equipment is required by regulation, license condition, or CoC to be available and operable to prevent releases that could exceed regulatory limits, to prevent exposures to radiation or radioactive materials that could exceed regulatory limits, or to mitigate the consequences of an accident; and (ii) no redundant equipment was available and operable to perform the required safety function. The prompt notification is necessary to permit NRC to determine whether immediate response or corrective action is necessary to protect public health and safety and to determine whether patterns exist that might indicate poor design, fabrication, or operation requiring corrective action.

Certain sections of Part 72 vary from the OMB Guidelines by requiring that licensees maintain records for more than 3 years:

- 10 CFR 72.30(d) requires that licensees keep records important to the safe and effective decommissioning of the facility until the license is terminated by the Commission. Section 72.30(d)(1) requires that licensees keep records of spills or other unusual occurrences involving the spread of contamination that remains after cleanup, including information on involved nuclides, quantities, forms, and concentrations. Section 72.30(d)(2) requires that licensees keep records of as-built drawings and modifications of structures and equipment in restricted areas where radioactive materials are used and/or stored, and of locations of possible inaccessible contamination such as buried pipes. Section 72.30(d)(3) requires that licensees keep a list, contained in a single document and updated at least every 2 years, of (i) all areas designated and formerly designated as restricted areas as defined in § 20.1003, and (ii) all areas outside of restricted areas that require documentation under § 72.30(d)(1), above. Section 72.30(d)(4) requires that licensees keep records of the cost estimate performed for the decommissioning funding plan or of the amount certified for decommissioning, and records of the funding method used for assuring funds. The records must be retained for longer than 3 years in order to permit NRC inspectors to review and evaluate licensee decontamination and decommissioning activities.
- 10 CFR 72.48(d)(1) contains requirements for retention of records of changes in the facility or storage cask design, procedures, and tests and experiments until spent fuel is no longer stored in the facility or the spent fuel storage cask design is no longer being used or the Commission terminates the license or CoC. These records must include a written evaluation that provides the basis for the determination that the change, test, or experiment does not require a license or CoC amendment. This information must be maintained for more than 3 years in order to permit the NRC inspection and licensing staffs to evaluate the safety of changes and practices implemented or proposed to be implemented by licensees.
- Section 72.72(a) requires that the licensee keep records for as long as the material is stored and for 5 years after it is transferred or disposed. The records must show the receipt, inventory (including location), disposal, acquisition, and transfer of all spent fuel and HLW. The records must include as a minimum the shipper of the material to the ISFSI or MRS, the quantity of material per item, item identification and seal number, storage location, onsite movements of each storage canister, and ultimate disposal. Section 72.72(b) requires that each licensee retain a copy of the current annual physical inventory of spent fuel in storage as a record until the Commission terminates the license. Section 72.72(c) requires that each licensee retain a copy of the current written material control and accounting procedures for spent fuel in storage as a record until the Commission terminates the license. The records required by § 72.72 must be retained for more than 3 years because they are used by the licensee to carry out its material control and accounting operations and are reviewed by NRC inspectors to ensure the adequacy of the licensee's programs and compliance with NRC regulations. The records are reviewed by the inspection staff to detect diversion of material and to initiate prompt action in the event of a diversion.

- Section 72.174 requires that records pertaining to the design, fabrication, erection, testing, maintenance, and use of structures, systems, and components important to safety must be retained until the Commission terminates the license. The records must be retained for more than 3 years in order to preserve evidence of activities affecting quality, including design records, records of use and the results of reviews, inspections, tests, audits, monitoring of work performance, and materials analyses, as well as closely related data such as qualifications of personnel, procedures, and equipment.
- Section 72.180 requires that the physical security plan be retained as a record until the Commission terminates the license. The plan must be retained for longer than 3 years because it is used by the licensee to comply with the applicable requirements of Part 73 at the site and during transportation to and from the site. It includes the design for physical protection and the safeguards contingency plan and guard training plan, and lists tests, inspections, audits, and other means to be used to demonstrate compliance with NRC requirements.
- Section 72.184(b) requires that the licensee retain the safeguards contingency plan procedures as a record until the Commission terminates the license. The procedures must be retained for longer than 3 years because they are used by the licensee to effect the actions and decisions contained in the safeguards contingency plan to provide an adequate level of protection against threats and industrial sabotage.
- 10 CFR 72.212(b)(5), (6), (7), and (8) requires that licensees retain records of written evaluations longer than 3 years. The records of the evaluations are needed to establish that (i) conditions in the CoC have been met, (ii) cask storage pads and areas have been designed to adequately support the static load of the stored casks, and (iii) the requirements of § 72.104 (regarding radioactive material in effluents and direct radiation) have been met. They are also needed to demonstrate whether the licensee's site parameters are enveloped by the cask design capability, and whether activities related to storage of spent fuel under the general license involve any unreviewed facility safety question or change in the facility technical specifications, as provided in § 50.59.
- 10 CFR 72.212(b)(11) requires that licensees retain, for longer than 3 years, a copy of the CoC and documents referenced in the certificate for each cask used for storage of spent fuel. The cask is an item that is important to safety and maintaining a copy permits the licensee and NRC inspectors to ensure that use of the cask is in compliance with conditions in the cask certificate.
- 10 CFR 72.212(b)(12) requires that the historical cask record provided by the cask vendor pursuant to 10 CFR 72.234(d) be maintained by the licensee until 3 years after the cask is decommissioned. The record will be used by NRC to confirm compliance with the certificate.

- 10 CFR 72.212(b)(13) requires that the licensee retain, for longer than 3 years, written procedures for conducting activities related to storage of spent fuel under the general license. The written procedures must be retained until spent fuel is no longer stored under the general license. They are used by the licensee and reviewed by NRC to ensure that activities are conducted in accordance with Commission regulations.
- 10 CFR 72.234(d) requires that a cask vendor retain, for longer than 3 years, a composite record of each cask. The vendor is required to provide the original record to the cask user and maintain a composite record for all casks shipped to users. The composite record must be sent to the Commission if the vendor permanently ceases production under a CoC. The original record is provided to the user so that the historical cask record can be properly maintained by the user. The composite record is made available to NRC for inspection to ensure that a complete historical record of all casks is available.
- 10 CFR 72.234(f) requires that cask vendors retain, for longer than 3 years, written procedures and tests established prior to use of the casks. A copy of these procedures and tests must be provided to cask users to assist them in development of procedures for use of the casks. The procedures are retained for as long as the cask design is in use.
- 10 CFR 72.236(k) requires that a cask vendor provide cask markings which would have to last more than 3 years. This is necessary to identify casks as containers for spent fuel and enable cask users to establish material control and inventory records.

#### 8. Consultations Outside the NRC

Opportunity for public comment on the information collection requirements for this clearance package was published in the Federal Register on June 15, 2017 (82 FR 27536). As part of the public consultation process, the NRC staff contacted a total of seven potential respondents, including Part 72 CoC holders, site specific licensees and decommissioned licensees. These respondents were contacted via e-mail.

The NRC received one comment from Portland General Electric Company. The commenter requested that the NRC update 10 CFR 72 Subpart G so that an ISFSI specific licensee could make changes that do not reduce commitments to their NRC approved Part 72 quality assurance program without prior NRC approval. Currently, all changes to Part 72 QA programs require NRC approval. The commenter stated that this change would be consistent with a June 2015 change to requirements for QA programs under 10 CFR 71 and requested that, after this change, the current guidance document for Part 71 and 72 QA programs (Information Notice 2002-35) be revised or withdrawn.

The NRC staff acknowledges the comment regarding current guidance and requirements for Part 72 QA programs. The NRC will consider any revisions to guidance that may be needed. Because the requested change to Part 72 Appendix G would require a rulemaking, staff provided the commenter with instructions on how to use the Petition for Rulemaking Process to formally request changes to the current regulations (<https://www.nrc.gov/about->

[nrc/regulatory/rulemaking/petition-rule.html](http://nrc/regulatory/rulemaking/petition-rule.html)).

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). However, no information normally considered confidential or proprietary is requested.

11. Justification for Sensitive Questions

No sensitive information is requested under these regulations.

12. Estimated Burden and Burden Hour Cost

There are 82 respondents (4 certificate holders, 63 general licensees, and 15 site specific licensees).

The estimated annual cost to licensees to respond to the collection requirements is 79,040 hours at a cost of \$20,945,600 (79,040 x \$265/hr), as shown in the table below:

|                               | <b>Burden</b>   | <b>Cost at \$265/hr</b> |
|-------------------------------|-----------------|-------------------------|
| <b>Reporting</b>              | 33,909.0        | \$8,985,885             |
| <b>Recordkeeping</b>          | 42,319.0        | \$11,214,535            |
| <b>Third-Party Disclosure</b> | 2,812.0         | \$745,180               |
| <b>TOTAL</b>                  | <b>79,040.0</b> | <b>\$20,945,600</b>     |

|                               | <b>Responses</b> |
|-------------------------------|------------------|
| <b>Reporting</b>              | 607.3            |
| <b>Recordkeeping</b>          | 82.0             |
| <b>Third-Party Disclosure</b> | 150.0            |
| <b>TOTAL</b>                  | <b>839.3</b>     |



The cost is calculated at a rate of \$265 per hour, which is based on NRC's fee recovery rate.

See the supplemental document "Part 72 Burden Spreadsheet" for detailed information about burden for each information collection requirement in Part 72 (Table 1 for reporting burden, Table 2 for recordkeeping burden, Table 3 for Third Party Disclosure, and Table 4 for a summary of total burden hours and costs.)

### 13. Estimate of Other Additional Costs

The NRC has determined that the quantity of records to be maintained is roughly proportional to the recordkeeping burden and, therefore, can be used to calculate approximate records storage costs. Based on the number of pages maintained for a typical clearance, the records storage cost has been determined to be equal to 0.0004 times the recordkeeping burden cost. Because the recordkeeping burden is estimated to be 42,343 hours, the storage cost for this clearance is \$4,486 (42,319 hours x 0.0004 x \$265/hour).

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

The following table summarizes costs to the Federal government for the collection and storage of information collections in Part 72:

| <b>Item</b>   | <b>Cost</b>        |
|---|--------------------|
| NRC Staff Review (professional effort – 18,839 hrs x \$265/hr)            | \$4,992,335        |
| Contractor Technical Assistance   | \$1,920,000        |
| Annual cost – clerical processing (clerical effort – 1,950 hrs x \$47/hr) | \$91,650           |
| Annual cost for record holdings (846.4 cu ft x \$209/cu ft.)              | \$176,898          |
| Document processing costs   | \$28,000           |
| <b>Total Annual Cost</b>  | <b>\$7,208,883</b> |

These costs are fully recovered through fee assessments to NRC licensees pursuant to 10 CFR Parts 170 and 171.

### 15. Reason for Changes in Burden or Cost

The burden increased by 9,945 hours, from 69,065 hours to 79,040 hours.

The majority of the increase in burden can be attributed to an increase in the number of licensees subject to Part 72. In the last renewal submission in 2014, there were 76 licensees and vendors subject to Part 72. This number had increased to 82 licensees and vendors. The estimates for the current submission are based on 82 current NRC licensees and vendors subject to Part 72. As a result of this increase in the number of respondents, the number of burden hours associated with various sections has increased.

Since the last submission, the fee rate has decreased from \$272/hr to \$265/hr.

16. Publication for Statistical Use

None.

17. Reason for Not Displaying the Expiration Date

The recordkeeping and reporting requirement for this information collection are associated with regulations and are not submitted on instruments such as forms or surveys. For this reason, there are no data instruments on which to display an OMB expiration date. Further, amending the regulatory text of the CFR 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

Statistical methods are not used in this collection of information.

## APPENDIX A

DESCRIPTION OF INFORMATION COLLECTIONS CONTAINED IN  
10 CFR PART 72  
LICENSING REQUIREMENTS FOR THE INDEPENDENT STORAGE OF  
SPENT NUCLEAR FUEL AND HIGH-LEVEL RADIOACTIVE WASTE  
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Section 72.7 provides that the Commission may grant exemptions from the requirements of Part 72 under specified conditions, upon the application of any interested person or on its own initiative. Applications under this section are examined by the NRC staff to determine whether the requested exemption is authorized by law and ensure it will not endanger life or property or the common defense and security, and to determine if it is otherwise in the public interest.

Section 72.11 requires that an applicant or licensee notify the Commission of information which the licensee recognizes as having significant implications for the public health and safety or the common defense and security. This requirement applies only to information which is not covered by other reporting or updating requirements. The information must be provided within two working days.

This requirement is necessary because there may be some circumstances in which licensees, certificate holders and applicants for a license or Certificate of Compliance (CoC) possess some information which could be important to the protection of public health and safety and the environment or the common defense and security but which is not otherwise required to be reported. No formal program is required. What is expected is that licensees and certificate holders will maintain a professional attitude toward safety and that if some potential safety information is identified by them, the information will be provided freely and promptly to the NRC so that the agency can evaluate it and act on it if necessary.

Section 72.16 provides instructions for filing an application for an NRC license under Part 72, including a requirement that the application be made under oath and that the applicant maintain the capability to generate additional copies as necessary.

The information submitted in the application pursuant to this section and other sections described below is reviewed by various NRC organizational units to assess the adequacy of the applicant's organization, training, experience, procedures and plans for protection of the public health and safety, common defense and security, and the environment. The NRC review and the findings derived therefrom form the basis for NRC decisions concerning the issuance, modification, or revocation of licenses to receive, transfer, and possess power reactor spent fuel, high-level radioactive waste (HLW), or reactor-related GTCC waste.

Section 72.22, which specifies a portion of the contents of the license application itself, requires the applicant to provide information about its identity, financial qualifications, the construction and operation costs of an ISFSI or MRS, and shutdown and decommissioning costs. This information will be reviewed by NRC licensing personnel to determine whether the applicant will be able to provide an adequate level of financial responsibility to avoid adverse consequences to public health and safety.

Section 72.24 requires the submission of a Safety Analysis Report (SAR) to allow a safety assessment of the design and operation of the ISFSI or MRS. The information must include descriptions and assessments of the site, major structures, systems and components of the ISFSI or MRS, the means for controlling and limiting occupational radiation exposures, operating plans, emergency plans, technical qualifications of the applicant, a description of means for controlling radioactive materials released in effluents, and descriptions of quality assurance, security, and decommissioning plans. The information will be reviewed by the NRC staff to determine whether there is reasonable assurance that the activities to be conducted under the license can be carried out without endangering the health and safety of the public and that they will be conducted in compliance with the regulations.

Section 72.26 requires proposed technical specifications and a summary statement of their bases and justifications. The proposed technical specifications will be reviewed by the NRC licensing staff to determine whether they will ensure safe operation of the facility. Approved technical specifications will be incorporated in the license.

Section 72.28 requires inclusion of the applicant's technical qualifications, a description of the personnel training program, a description of the applicant's operating organization and delegations of responsibility and authority, and a commitment by the applicant to have and maintain an adequate complement of trained and certified plant personnel prior to the receipt of spent fuel for storage. The information submitted will be reviewed by the NRC licensing staff to determine whether the applicant's technical qualifications, training and organization will be adequate for safe operation.

Section 72.30 sets forth the requirements for financial assurance and recordkeeping for decommissioning. The records will be used by the licensee to prepare decontamination and decommissioning plans and by NRC inspectors for review and evaluation of licensee decontamination and decommissioning plans and activities. The records and reports required by § 72.30 are necessary for the Commission to determine whether an applicant will be able to decontaminate licensed premises to a level suitable for release for unrestricted use before the license may be terminated. NRC will review the information to determine whether adequate funds will be available to ensure that the applicant will conduct decontamination efforts in a timely manner and minimize exposure of workers to radioactive materials. The information will also be used to ensure that the decontamination efforts will reduce the residual radioactive contamination sufficiently to protect the public health and safety after the site is released for unrestricted use, so that no future users of the site will be inadvertently exposed to radiation.

Sections 72.30(a) specify that licensees are required to submit a certification or funding plan.

Section 72.30(b) is revised by the DPR. Former 10 CFR 72.30(b) required specific licensees to submit at the time of license application, a decommissioning funding plan (DFP) that includes a decommissioning cost estimate (DCE) and a description of the method of assuring funds for decommissioning [from 72.30(c)], including a means of adjusting the cost estimates and associated funding levels periodically over the life of the ISFSI. The DPR revisions to 72.30(b) includes new factors for what the detailed DCE must include (e.g., cost of independent contractor to perform decommissioning, cost to decommission to unrestricted release levels, adequate contingency factor); requires justification of key assumptions in the DCE; and requires information on the volume

of subsurface contamination (that would require remediation to meet the criteria for license termination). The revised 10 CFR 72.30(b) is applicable to both specific- and general- licensed Independent Spent Fuel Storage Installations (ISFSIs). Existing ISFSI licensees (both general and specific) were required to submit a decommissioning funding plan (DFP) for NRC review and approval by 12/17/12. However, the 10 CFR 72.30(b) does not include a submission date/deadline for when future general-licensed ISFSIs need to submit a decommissioning funding plan. The staff plans to issue a letter to clarify that general licensees must submit the DFP by the time they first load fuel (i.e., when the general license “commences” per 10 CFR 72.212(a)(3)), but encourage them to submit it at the time they notify the NRC 90-days before storage of spent fuel under the general license, per 10 CFR 72.212(b)(1).

Section 72.30(c) requires licensees to update and submit DFP every 3 years, with any adjustments to account for changes in costs and extent of contamination.

Section 72.30(d) requires licensees to revise and submit DFP within one year of completing any surveys that detect residual radioactivity that exceeds unrestricted release levels.

Section 72.30(e) provides the acceptable methods of financial assurance for decommissioning. The DPR revisions include changes to financial instruments that may be used to assure funds, and requires notification of changes to financial instruments.

Section 72.30(f) requires specific and general licensees to keep records of information important to decommissioning (e.g., records of spills, contamination, surveys, as-built drawings, etc.). It also required licensees to keep records of the cost estimate performed for the DFP and records of the funding method used for assuring funds. The DPR revisions include a correction (removed reference to “the amount certified for decommissioning” in (d)/(f)(4), as Part 72 doesn’t have provisions for an ISFSI licensee to certify to a prescribed amount of financial assurance).

Section 72.30(g) requires licensees to monitor the balance of funds to account for market variations, replenish funds, and report those actions to the NRC within certain time periods.

Section 72.32 (a) requires that each application for an ISFSI licensed under this part, and not located on the site or exclusion area of a nuclear power reactor, must have an Emergency Plan.

Section 72.32(b) requires that each application for an MRS or ISFSI that is licensed under this part that may process and/or repackage spent fuel, must be accompanied by an Emergency Plan. Emergency Plans must include: (1) a brief description of the facility and surrounding area; (2) an identification of each type of radioactive material accident; (3) a classification system for “alerts;” (4) identification of the means of detecting an accident condition; (5) a description of the means of mitigating the consequences of each type of accident; (6) a description of the methods and equipment to assess releases of radioactive materials; (7) a description of the responsibilities of licensee personnel should an accident occur; (8) a commitment to and description of the means to promptly notify offsite response organizations and request offsite assistance and to notify NRC; (9) a description of the types of information on facility status, radioactive releases, and protective actions to be given to NRC and offsite response organizations; (10) a description of the training licensees will provide workers for emergency response; (11) a description of the means of restoring the facility to a safe condition after an accident; (12) provisions for conducting semiannual communications checks with offsite response organizations and biennial onsite exercises to test response to simulated emergencies and evaluations of such exercises; (13) a certification that the

applicant has met its responsibilities under the Emergency Planning and Community Right-to-Know Act of 1986; (14) a 60-day opportunity for offsite response organizations expected to respond in case of an accident to comment on the initial submittal of the emergency plan before submitting it to NRC; (15) a description of the arrangements made for requesting and effectively using offsite assistance and (16) arrangements made for providing information to the public.

These emergency plans are needed to ensure that plans are in place in the event of an actual emergency.

Section 72.34 requires that an application for a license under Part 72 must be accompanied by an Environmental Report which meets the requirements of Subpart A of Part 51. The Environmental Report is reviewed by the NRC staff and serves as a basis for the preparation by NRC of an Environmental Impact Statement or an Environmental Assessment, which gives consideration to the environmental impacts associated with construction and operation of a proposed facility or conduct of the activity and assesses impacts in terms of the available alternatives. This information is necessary to permit NRC to comply with the requirements of the National Environmental Policy Act of 1969. The burden and cost associated with this requirement are attributable to and have been previously cleared by OMB under Part 51, OMB No. 3150-0021, which should be referred to for further supporting information, burden and cost data.

Section 72.42 provides that licensees may submit applications for renewal of licenses issued under Part 72. Applications for renewal must provide the information required for an application for a new license and address aging for the systems, structures and components important to safety, but information previously submitted in earlier applications or reports may be incorporated by reference without being resubmitted. The duration of a license for an ISFSI may be up to 40 years and the duration of a license for an MRS may be up to 40 years. The information submitted in an application for renewal will be reviewed by the licensing staff to make the determinations with regard to safety, environmental protection, financial responsibility, and other matters as discussed under §§ 72.22 through 72.34 above.

Section 72.44(b)(3) provides that NRC may require further statements after the filing of the application and before expiration of the license to enable NRC to determine whether a license should be modified, suspended, or revoked. Such additional information is sometimes needed to clarify information submitted in the application, or to rectify deficiencies in proposed or existing programs for protection of the public health and safety, the common defense and security, or the environment. The additional information submitted is reviewed by various NRC organizational units to assess the adequacy of the licensee's systems, structures, and components that are important to safety as well as procedures and plans for protection of the public health and safety, common defense and security, and the environment. The NRC review and the findings derived therefrom form the basis for NRC decisions concerning the issuance, modification, or revocation of a license for an ISFSI or MRS.

Section 72.44(b)(4) requires that an NRC-approved personnel training and certification program be in effect prior to receipt of spent fuel for storage at an ISFSI or MRS. The information submitted will be reviewed by the licensing staff to determine whether the training and certification program is adequate to assure protection of the public health and safety.

Section 72.44(b)(6) requires each licensee to notify the NRC in writing immediately following the commencement of a bankruptcy proceeding by or against the licensee. No action is required of a licensee unless and until a bankruptcy petition is filed.

Notification of the NRC in cases of bankruptcy would alert the Commission so that it may deal with potential hazards to the public health and safety posed by a licensee that does not have the resources to properly secure the licensed material or clean up possible contamination. The information provided by the required notification would be used by the Regional staff, in consultation with headquarters legal and program staff, to initiate a determination of the need for prompt NRC response or regulatory action. In addition, prompt notification would allow NRC to take timely and appropriate action in a bankruptcy proceeding to seek to have available assets of the licensee applied to cover costs of site cleanup before funds are disbursed and become unavailable for cleanup.

Section 72.44(d) requires that each license include technical specifications, which are submitted by the applicant, stating the limits on the release of radioactive materials for compliance with limits of Part 20 and the "as low as reasonably achievable" objectives for effluents. In addition, § 72.44(d)(1) requires technical specifications that establish operating procedures for control of effluents. Section 72.44(d)(2) requires technical specifications that require the establishment of an environmental monitoring program to ensure compliance with the technical specifications for effluents. Section 72.44(d)(3) requires technical specifications that require the submission of an annual report specifying the quantity of each of the principal radionuclides released to the environment in liquid and gaseous effluents during the previous 12 months of operation and such other information as may be required by the Commission to estimate maximum radiation dose commitment to the public resulting from effluent releases.

The information submitted pursuant to these technical specification requirements is reviewed by the NRC staff to determine whether the technical specifications provide an adequate margin of protection for public health and safety and the environment, and to ascertain whether licensee operations are consistent with the commitments made in the application and technical specifications. The technical specifications and reports provide a structured basis for assessing the effectiveness of regulation of releases of radioactive material from an ISFSI or MRS to unrestricted areas by engineering design features and administrative controls.

Section 72.44(e) provides that a licensee must submit an application for an amendment to the license if the licensee wishes to make any change that would decrease the effectiveness of the physical security plan. The licensee may make changes without prior Commission approval, provided that the changes do not decrease the effectiveness of the plan. In such cases, the licensee is required to submit a report containing a description of each such change within 2 months of the change. The licensee is required to maintain records of changes made without Commission approval for 2 years after the change. This information is needed in order for the regulatory staff to evaluate changes which a licensee has made, or proposes to make, in the physical security plan.

Section 72.44(f) requires licensees to follow and maintain in effect an emergency plan approved by the Commission. Licensees may make changes to the approved plan without prior Commission approval only if such changes do not decrease the effectiveness of the plan and the plan as changed continues to meet specified requirements. Licensees are required to submit a report to

the Commission which describes each change made to the plan within 6 months after the change is made. Licensees desiring to make changes that would decrease the effectiveness of the approved emergency plan are required to submit an application to the Commission for approval.

Section 72.48(c)(2) requires that a specific licensee obtain a license amendment pursuant to Section 72.56, a certificate holder obtain a CoC amendment pursuant to §72.244, and a general licensee request that the certificate holder obtain a CoC amendment pursuant to §72.244, prior to implementing a proposed change, test, or experiment if the change, test, or experiment meets the conditions of Section 72.48(c)(2)(i)-(iii).

Section 72.48(d)(1) requires that licensees and certificate holders maintain records of changes in the facility or spent fuel storage cask design, of changes in procedures, and of tests and experiments made pursuant to Section 72.48(c). These records must include a written evaluation which provides the basis for the determination that the change, test, or experiment does not require a license or CoC amendment pursuant to Section 72.48(c). Section 72.48(d)(2) requires that licensees and certificate holders submit, as specified in Section 72.4, a report containing a brief description of any changes, tests, and experiments including a summary of the evaluation of each at intervals not to exceed 24 months. Section 72.48(d)(3) contains the requirements for duration of recordkeeping for changes in the facility or spent fuel storage cask design; Section 72.48(d)(4) contains the duration of recordkeeping for changes in procedures and of tests and experiments must be maintained. Section 72.48(d)(5) requires that the holder of a spent fuel cask design CoC who permanently ceases operation must provide records of changes to the new certificate holder or to the Commission, as appropriate, in accordance with Section 72.234(d)(3). Section 72.48(d)(6) contains requirements for general licensees to provide records of any changes to spent fuel storage cask design to the applicable certificate holder within 60 days of implementation of the design change.

This information is needed in order to permit the NRC staff to evaluate the safety of any changes, tests, experiments, and practices implemented or proposed to be implemented by licensees to ensure the protection of the public health and safety, common defense, security, and the environment.

Section 72.50 requires the submission of an application to the Commission if it is desired to transfer a license to another person. The application must include information on the identity and technical qualifications of the proposed transferee and a statement of the purposes for which transfer is requested and the nature of the transaction necessitating or making desirable the transfer of the license. The Commission may also require that a written consent from the current licensee or a copy of a court order be filed, attesting to the transferee's right to possession of the radioactive materials and facilities involved.

This information will be reviewed by the NRC staff to determine whether the proposed transferee is qualified to be the holder of the license and whether the transfer of the license is consistent with applicable laws, regulations and orders.

Section 72.52(b) makes clear the right of a secured creditor of a licensee to apply for transfer of a license under Part 72. The burden and cost associated with this section are included in § 72.50 above.



Section 72.54(d) requires the licensee to notify the Commission in writing within 60 days if (1) the licensee decides to cease principal activities, (2) no principal activities have been conducted for 24 months at the site, or (3) no principal activities have been conducted for 24 months in any separate building or outdoor area suitable for unrestricted use. If the licensee is required to have a decommissioning plan, such plan must be submitted within 12 months of notification.

The information is needed to allow NRC to plan its involvement in the decommissioning process and to determine whether there is reasonable assurance that the decommissioning and disposal will be performed in accordance with the regulations, will provide adequate protection of the public health and safety, common defense, security, and the environment.

Section 72.54(f) provides for requests to delay initiation of decommissioning or for an alternate schedule for plan submittal. Section 72.54(f)(1) allows the licensee to submit a request to delay initiation of decommissioning, and establishes time requirements for submittal of the request. This information enables the Commission to determine whether a delay in decommissioning warrants relief and is in the public interest. Section 72.54(f)(2) allows the licensee the option to submit an alternate schedule for submitting the decommissioning plan. This information will enable the Commission to consider individual circumstances that may support such an alternate schedule on a case-by-case basis.

Section 72.54(g) describes the contents of the decommissioning plan. The plan must include: (1) a description of the current conditions of the site, building, or outdoor area to be decommissioned, (2) a choice of the alternative for decommissioning with a description of planned decommissioning activities, (3) a description of methods to protect workers and the environment against radiation hazards during decommissioning, (4) a description of the planned final radiation survey, (5) an updated detailed cost estimate for decommissioning, comparison of that estimate with current funds set aside for decommissioning, and a plan for assuring the availability of adequate funds for completion of decommissioning, and (6) a description of technical specifications and QA provisions in place during decommissioning.

This information is needed by the Commission to fully assess the risk of the environmental impact of decommissioning activities and to plan its involvement in decommissioning oversight and ultimate termination or modification of the license to exclude the decommissioned areas.

Section 72.54(j)(2) requires licensees, except those having an approved alternate schedule, to request license termination within 24 months following approval of the final decommissioning plan. This submittal permits NRC to ensure that decommissioning is completed in a timely manner, reducing risks to the environment and to the health and safety of the public.

Section 72.54(k) allows the licensee to request an alternative schedule for completion of decommissioning. This information is needed to permit NRC to determine whether a delay in decommissioning warrants relief and is in the public interest. It also allows the Commission to plan its involvement in decommissioning oversight and ultimate termination of the license or modification of the license to exclude decommissioned areas.

Section 72.54(l) requires that, as a final decommissioning step for a site, building, or outdoor area, the licensee must certify the disposition of licensed material by submitting NRC Form 314 or equivalent information, and the results of a survey, including a report of radiation levels, the type of survey instrument used, and a certification as to calibration and testing of the survey instrument.

This information is needed to permit NRC to ensure that decommissioning is adequately completed. NRC Form 314 has been previously approved under OMB Clearance Number 3150-0028, which should be referred to for additional justification, burden and cost information.

Section 72.56 requires that an application be filed whenever a licensee desires to amend a license. The application must describe the changes desired and the reasons for such changes, following the applicable provisions for an original application.

The information submitted is reviewed by the NRC staff to assess the adequacy of the applicant's structures, systems, and components important to safety, equipment, organization, training, experience, procedures and plans for protection of the public health and safety, common defense and security, and the environment. The NRC review and the findings derived therefrom form the basis for NRC decisions concerning the modification of the license.

Section 72.62(d) requires a licensee to submit information concerning backfitting or proposed backfitting of the facility at Commission request. This information will be reviewed by the NRC staff to determine whether or not the backfitting or proposed backfitting will provide substantial additional protection to the environment or to occupational or public health and safety.

Section 72.70(a) requires each specific licensee for an ISFSI or MRS to periodically update the final safety analysis report (FSAR) to assure that the information included in the report contains the latest information developed. Section 72.70(b) requires that each update submitted is to contain all the changes necessary to reflect information and analyses submitted to the Commission by the licensee or prepared by the licensee pursuant to Commission requirement since the submission of the original FSAR or, as appropriate, the last update to the FSAR under this section.

Section 72.70(c) contains requirements on the content and form of the updates. The information will be reviewed by the NRC staff to determine whether there are any changes which affect safety margins approved during licensing.

Section 72.72(a) requires that the licensee keep records showing the receipt, inventory (including location), disposal, acquisition, and transfer of all special nuclear material with quantities as specified in Section 74.13(a)(1). The records must include as a minimum the shipper of the material to the ISFSI or MRS, the quantity of material per item, item identification and seal number, storage location, onsite movements of each storage canister, and ultimate disposal. The records must be retained for as long as the material is stored and for 5 years after it is transferred or disposed of.

Section 72.72(b) requires that each licensee conduct an annual physical inventory of spent fuel, HLW, and GTCC waste containing special nuclear material meeting the requirements of Section 72.72(a). A copy of the current inventory must be retained as a record until the Commission terminates the license.

Section 72.72(c) requires that each licensee establish, maintain and follow written material control and accounting procedures that are sufficient to enable the licensee to account for the spent fuel in storage. A copy of the current procedures must be retained as a record until the Commission terminates the license.

Section 72.72(d) requires that records of spent fuel and HLW in storage be kept in duplicate, at separate sites, to ensure that a single event cannot destroy both sets of records. Records of material transferred out of the facility must be preserved for 5 years after the date of transfer.

The material control and accounting procedures are used by the licensee to carry out its material control and accounting operations and are reviewed by NRC inspectors to ensure the adequacy of the licensee's programs and compliance with NRC regulations. The records are reviewed by the inspection staff to detect diversion of material and to initiate prompt action in the event of a diversion.

Section 72.74 requires that a licensee report an accidental criticality or any loss of special nuclear material to the NRC Operations Center by the Emergency Notification System or by telephone within one hour. This information is necessary to promptly inform NRC of particularly serious maloperations or accidents, and is evaluated by NRC to determine whether any immediate response or corrective action may be necessary.

Section 72.75(a) requires the licensee to notify the NRC Operations Center within 1 hour after the declaration of an emergency. The information will be used by NRC to determine whether immediate response or corrective action is needed to protect public health and safety.

Section 72.75(b)(1) and (2) requires each licensee to notify the NRC as soon as possible, but no later than 4 hours after the discovery of any of the following events or conditions involving spent fuel, HLW, or reactor-related GTCC waste: (1) any action taken in an emergency that departs from a condition or a technical specification contained in a license or a CoC issued under Part 72 when the action is immediately needed to protect the public health and safety, and no action consistent with the license or CoC conditions or technical specifications that can provide adequate or equivalent protection is immediately apparent; and (2) any event or situation related to the health and safety of the public or onsite personnel, or protection of the environment, for which a news release is planned or notification to other government agencies has been or will be made. Such an event may include an onsite fatality or inadvertent release of radioactively contaminated materials. This requirement is consistent with the requirement in 10 CFR 50.72(b)(2)(xi) for reactor facilities. Reports of these events are needed promptly because they may involve events (e.g., an onsite fatality or inadvertent release of radioactively contaminated materials) that require the NRC to respond to heightened public concerns.

Section 72.75(c)(1) - (3) - requires licensees to notify the NRC as soon as possible but no later than 8 hours following discovery of events or conditions involving spent fuel, or reactor-related GTCC waste: (1) a defect in any spent fuel storage structure, system, or component that is important to safety; (2) a significant reduction in the effectiveness of any spent fuel storage confinement system; and (3) an event that requires the transport of a radioactively contaminated person to an offsite medical facility for treatment. The information will be used by NRC to determine whether response or corrective action is necessary to protect public health and safety and to determine whether patterns exist that might indicate poor design, fabrication, or operation requiring corrective action.

Section 72.75(d)(1) - (2) - requires licensees to notify the NRC within 24 hours following discovery of any of the following events involving spent fuel, HLW, or reactor-related GTCC waste: (1) safety equipment is disabled or fails to function as designed, when (i) the equipment is required by

regulation, license condition, or CoC to be available and operable to prevent releases that could exceed regulatory limits, to prevent exposures to radiation or radioactive materials that could exceed regulatory limits, or to mitigate the consequences of an accident; and (ii) no redundant equipment was available and operable to perform the required safety function; and (2) allows the licensee to delay the notification required under § 72.75(d), if the end of the 24-hour period occurs outside of the NRC's normal working day, on a weekend, or a Federal holiday. In such cases, the licensee would be required to notify the NRC before 8:00 a.m. Eastern time on the next working day. This requirement is consistent with the time that information is needed for NRC action. The information will be used by NRC to determine whether response or corrective action is necessary to protect public health and safety and to determine whether patterns exist that might indicate poor design, fabrication, or operation requiring corrective action.

Section 72.75(e)(1)-(3) requires that reports made by licensees in response to the requirements of § 72.75(a), (b), (c), or (d): (e)(1) be made by telephone to the NRC Operations Center; (e)(2) identify the Emergency Class declared or the paragraph of 72.75 requiring notification of the non-emergency event; and (e)(3) to the extent that the information is available at the time of notification, the caller's name and call back telephone number; a description of the event, including date and time; the exact location of the event; the quantities, and chemical and physical forms of the spent fuel, HLW, or reactor-related GTCC waste; and any personnel radiation exposure data. The information will be used by NRC to determine whether immediate response or corrective action is necessary to protect public health and safety.

Section 72.75(f)(1)-(3) requires, with respect to the telephone notifications made under §§ 72.75 (a), (b), or (c), in addition to making the required initial notification that each licensee, during the course of the event, shall (f)(1) immediately report any further degradation in the level of safety of the ISFSI or MRS or other worsening conditions, including those that require the declaration of any of the Emergency Classes, if such a declaration has not been previously made, or any change from one Emergency Class to another, or a termination of an Emergency Class; (f)(2) immediately report the results of ensuing evaluations or assessments of ISFSI or MRS conditions, the effectiveness of response or protective measures taken, and information related to ISFSI or MRS behavior that is not understood; and (f)(3) maintain an open, continuous communications channel with the NRC Operations Center upon request by the NRC. The information will be used by NRC to determine whether changes in the situation following the initial report make immediate response or corrective action necessary to protect public health and safety.

Section 72.75(g)(1)-(7) requires that licensees prepare and submit written reports to NRC as a follow-up to initial notifications under § 72.75(a), (b), (c), or (d) within 60 days of initial notification. Written reports prepared pursuant to other regulations may be submitted if the reports contain all the necessary information and the appropriate distribution is made. Section 72.75(g)(1) requires a brief abstract describing the major occurrences during the event; Section 72.75(g)(2) requires a narrative description of the event that must include the ISFSI or MRS operating conditions before the event, the status of structures, components or systems that were inoperable at the start of the event and that contributed to the event, dates and times of occurrences, the causes of each component or system failure or personnel error, if known; the failure mode, mechanism, and effect of each failed component, if known; a list of systems or secondary functions that were affected; for wet spent fuel storage systems only, an estimate of the time that any safety systems rendered inoperable remained inoperable; the method of discovery of each component or system failure or procedural error; automatically and manually initiated safety system responses for wet spent fuel

storage systems only; the manufacturer and model number or other identification of each component that failed, the quantity and chemical and physical forms of spent fuel, HLW; or reactor-related GTCC waste involved; Section 72.75(g)(3) requires an assessment of the safety consequences and implications of the event; Section 72.75(g)(4) requires a description of any corrective actions planned; Section 72.75(g)(5) requires reference to any previous similar events at the same facility that are known to the licensee; Section 72.75(g)(6) requires the name and telephone number of a person within the licensee's organization who is knowledgeable about the event and the facility's characteristics; and Section 72.75(g)(7) requires the extent of exposure of individuals to radiation or to radioactive materials. The information will be used by NRC to determine the appropriate level of response or corrective action necessary to protect public health and safety and to determine whether patterns exist that might indicate poor design, fabrication, or operation requiring corrective action. In addition, the information will be used by NRC to conduct or evaluate engineering studies of safeguards situations and trends and patterns analysis of operational occurrences, and identify accident precursors.

Section 72.75(h) provides that the Commission may require the licensee to submit additional information beyond that required by §72.75(g) if the Commission finds that supplemental material is necessary for complete understanding of an unusually complex or significant event. Requests for supplemental information will be made in writing and the licensee is required to submit the requested information as written supplements to the original written report. The information will be used by NRC to determine the appropriate level of response or corrective action necessary to protect public health and safety. In addition, the information will be used by NRC to conduct or evaluate engineering studies of safeguards situations and trends and patterns analysis of operational occurrences, and identify accident precursors and to determine whether patterns exist that might indicate poor design, fabrication, or operation requiring corrective action.

Section 72.76 requires each licensee to complete in computer-readable format and submit to the Commission a material status report in accordance with instructions (NUREG/BR - 0007 and Nuclear Materials Management and Safeguards System (NMMSS) Report D - 24 "Personal Computer Data Input for NRC Licensees"). These reports provide information concerning the special nuclear material contained in the spent fuel possessed, received, transferred, disposed of, or lost by the licensee. Material status reports must be filed within 60 days after the beginning of the period covered by the report. The Commission may, when good cause is shown, permit a licensee to submit material status reports at other times. The Commission's copy of this report must be submitted to the address specified in the instructions. These prescribed computer-readable forms replace the DOE/NRC Form 742 which has been previously submitted in paper form. The use of DOE/NRC Form 742 has been previously approved by OMB under Clearance Number 3150-0004.

Section 72.78 requires that whenever the licensee transfers or receives spent fuel, the licensee shall complete in computer-readable format a Nuclear Material Transaction Report in accordance with instructions (NUREG/BR - 0006 and NMMSS Report D- 24, "Personal Computer Data Input for NRC Licensees"). Each ISFSI licensee who receives spent fuel from a foreign source shall complete both the supplier's and receiver's portion of the Nuclear Material Transaction Report, verify the identity of the spent fuel, and indicate the results on the receiver's portion of the form. These prescribed computer-readable forms replace the DOE/NRC Form 741 which has been previously submitted in paper form. The use of DOE/NRC Form 741 has been previously approved by OMB under Clearance Number 3150-0003.

The information submitted per Sections 72.76 and 72.78 (above) is placed in the automated NMMSS which is maintained through a joint contract by NRC and DOE. Common reporting is used to minimize the reporting burden on industry members required to provide nuclear material data to one or both agencies in accordance with prevailing regulations or contractual obligations. The licensee is thus able to file one report to meet the requirements of both agencies. Compliance with specific reporting requirements is monitored by the agency for which the specific data are required.

Section 72.80(a) provides that the licensee must maintain any records and make any reports that may be required by the conditions of the license or by the rules, regulations and orders of the Commission. Records and reports provide a primary basis for determination that licensees receive, possess, transfer, and dispose of material as authorized by the license and in accordance with the regulations and orders of the Commission. This requirement provides additional regulatory support for those conditions and provisions and serves to remind licensees that they must comply not only with Part 72 but with other Commission regulations and with specific license conditions. The burden associated with those other requirements is accounted for in the clearances for those regulations.

Section 72.80(b) requires each licensee to annually submit a copy of its financial report, including certified financial statements. These reports are needed for the NRC regulatory staff to monitor the continued financial responsibility of the licensee in order to assure that the licensee will be able to continue to operate with an adequate margin of protection of public health and safety.

Section 72.80(c) requires licensees to maintain records that are required by the regulations or license conditions for the period specified in the regulation or license condition. If a retention period is not otherwise specified, the licensee must retain the records until the Commission terminates the license.

Section 72.80(e) requires licensees to forward to the NRC Regional Office records pertaining to decommissioning and offsite releases prior to license termination. This forwarding of records is necessary to ensure that adequate information will be available to evaluate offsite consequences, and ensure the site is decommissioned effectively.

Section 72.80(f) requires licensees to transfer records pertaining to decommissioning and offsite releases to the new licensee prior to license transfer or reassignment. The new licensee then becomes responsible for maintaining these records until license termination. This transferring of records is necessary to ensure that adequate information will be available to effectively decommission the facility.

Section 72.80(g) requires each specific licensee to notify the Commission of its readiness to begin operation at least 90 days prior to first storage of spent fuel or HLW in the ISFSI or MRS.

The following sections contain requirements that must be addressed in the application, (i.e., either in the SAR or in the Environmental Report.) The burden and cost data for these requirements are attributable to and reported under the application requirement, § 72.16, or the amendment requirement, § 72.56.

Section 72.90 requires that the licensee provide assessments of a number of factors concerning the site, including site characteristics that may directly affect the safety or environmental impact of the installation, frequency and severity of external natural and man-induced events, design basis external events, and the potential for radiological and other environmental impacts on the region.

Section 72.92 requires identification of natural phenomena which may affect safe operation and design, and requires the collection and evaluation of records of occurrence and severity of important natural phenomena. The records must be retained until the Commission issues the license.

Section 72.94 requires identification of past and present man-made facilities and activities that might endanger the proposed facility and identification of potential man-made events that affect the facility design, and requires collection and evaluation of information concerning the potential occurrence and severity of such events.

Section 72.98 requires that the licensee define the regional extent of external phenomena, man-made or natural, that are used as a basis for the design of the ISFSI or MRS, and identify the potential regional impact due to the construction, operation or decommissioning of the facility.

Section 72.100 requires that the licensee evaluate the proposed site with respect to the effects on populations in the region resulting from the release of radioactive materials under normal and accident conditions during operation and decommissioning, and with respect to the effects on the regional environment resulting from construction, operation and decommissioning, taking into account both usual and unusual site characteristics.

Section 72.102 requires that the licensee evaluate geological and seismological characteristics of the site.

Section 72.103 requires that ISFSI or MRS licensees evaluate geological and seismological characteristics of the site, consistent with the approaches used for nuclear power plants under 10 CFR 100.23, or allow a design earthquake ground motions appropriate for and commensurate with the risk associated with the ISFSI or MRS.

Section 72.104 requires that the licensee establish operational restrictions and limits to meet "as low as reasonably achievable" objectives for both radioactive materials in effluents and direct radiation levels associated with facility operations.

Section 72.108 requires that the licensee evaluate the facility with respect to the potential impact on the environment of spent fuel or HLW being transported within the region.

Section 72.120 requires the application to include the design criteria for the proposed spent fuel storage installation. These design criteria establish the design, fabrication, construction, testing, and performance requirements for structures, systems, and components important to safety. Section 72.126(d) requires that the licensee perform analyses to show that releases to the general environment during normal operations and anticipated occurrences will be within specified exposure limits. Analyses of design basis accidents must also be made to show that releases to the general environment will be within specified exposure limits.

The information submitted in the application pursuant to the above sections is carefully reviewed by the NRC licensing staff. Staff reviews the physical characteristics of the site, including seismology, meteorology, geology and hydrology, and the population density and use characteristics of the site environs, in order to determine whether these characteristics have been evaluated adequately and have been given appropriate consideration in the facility design.

The facility design and programs for construction and testing of structures, systems, and components important to safety are reviewed. A review is also performed of the applicant's calculations of the facility response to a broad spectrum of off-normal conditions and hypothetical accidents for the purpose of determining whether site acceptability guidelines are satisfied.

Sections 72.140 through 72.176(a) establish quality assurance (QA) requirements for licensees, applicants for a license, certificate holders, and applicant for a CoC that apply to all activities affecting the structures, systems, and components, and decommissioning, which are important to safety. Section 72.140(b) requires establishing, maintaining, and executing a QA program satisfying each of the applicable criteria of Subpart G of 10 CFR Part 72. Section 72.140(c) requires each licensee, applicant for a license, certificate holder, or applicant for a CoC to file a description of its QA program, including a discussion of which requirements of this subpart are applicable and how they will be satisfied. Section 72.140(d) indicates that a QA program previously approved by the Commission as satisfying the requirements of Appendix B to 10 CFR Part 50, subpart H to 10 CFR Part 71, or subpart G of 10 CFR Part 72, will be accepted as satisfying the QA requirements of paragraph (b) of this section, except as noted. The licensee or certificate holder must also notify NRC of its intent to use a previously approved QA program. Section 72.142 requires documentation regarding the authority and duties of persons and organizations performing activities affecting the functions of structures, systems, and components which are important to safety. Section 72.144 require establishment of a QA program documented by written procedures or instructions. Section 72.146 requires establishment of written procedures for design control. Section 72.148 requires establishment of measures to assure that adequate quality is required in procurement documents and requires, to the extent necessary, contractors or subcontractors to provide a QA program consistent with the applicable provisions of Part 72. Section 72.150 requires that activities affecting quality shall be prescribed by documented instructions, procedures, or drawings. Section 72.152 requires establishment of measures to control the issuance of documents, such as instructions, procedures, and drawings, including changes thereto, which prescribe all activities affecting quality. Section 72.154 requires the establishment of measures to assure that purchased material, equipment, and services conform to the procurement documents, and requires that such documentary evidence be available prior to installation or use of the material and equipment. Section 72.156 requires the establishment of measures to assure identification and control of materials, parts, and components, either by number on the item or on records traceable to the item. Section 72.158 requires the establishment of measures to assure that special processes, including welding, heat-treating, and nondestructive testing, are controlled and accomplished by qualified personnel using qualified procedures, in accordance with applicable codes, standards, specifications, criteria, and other special requirements. Section 72.160 requires the establishment of a program for inspection of activities affecting quality, including specification of any necessary mandatory hold points in appropriate documents. Section 72.162 requires written procedures for a test program to demonstrate that the structures, systems, and components will perform satisfactorily in service, and requires that the test results be documented and evaluated. Section 72.164 requires the establishment of measures to assure the proper control, calibration, and adjustment of tools, gages, instruments, and other measuring and testing devices. Section 72.166



requires the establishment of measures to control the handling, storage, shipping, cleaning and preservation of materials and equipment in accordance with instructions to prevent damage or deterioration. Section 72.168 requires establishment of measures to indicate, by the use of markings such as stamps, tags, labels, routing cards, or other suitable means, the status of inspections and tests performed on individual items and measures to indicate the operating status of structures, systems, and components, such as by tagging valves and switches, to prevent inadvertent operation. Section 72.170 requires establishment of measures to control materials, parts, or components that do not conform to requirements in order to prevent their inadvertent use. Section 72.172 requires establishment of measures for documenting the identification, cause, and correction of significant conditions adverse to quality. Section 72.174 requires maintenance of sufficient records to furnish evidence of activities affecting quality, including design records, records of use and the results of reviews, inspections, tests, audits, monitoring of work performance, and materials analyses, as well as closely related data such as qualifications of personnel, procedures, and equipment. Section 72.176 requires that a comprehensive system of QA audits be carried out in accordance with written procedures or check lists, and that audit results be documented and reviewed by management.

The program is used by the licensee and certificate holder and is reviewed by the NRC to assure that the facility and its structures, systems and components are designed, fabricated, constructed, tested, operated, maintained and decommissioned in accordance with established criteria in order to ensure that an adequate level of protection of the public health and safety is maintained.

The records are used by the licensee and by NRC inspectors to determine whether construction, fabrication, testing, and other activities important to safety have been properly conducted. They also provide a historical basis for evaluation and planning activities.

Section 72.180 requires the establishment of a physical security plan. The plan must demonstrate how the applicant plans to comply with the applicable requirements of Part 73 at the site and during transportation to and from the ISFSI or MRS, and must include the design for physical protection and the safeguards contingency plan and guard training plan. The plan must also include tests, inspections, audits, and other means to be used to demonstrate compliance with such requirements. The physical security plan must be retained as a record until the Commission terminates the license and superseded portions of the plan must be retained for 3 years after the change.

This information will be reviewed by the NRC staff to determine whether the physical security plan is adequate to provide protection to the material at the facility and during transport.

Section 72.182 requires a design for physical protection that must show the site layout and design features provided to protect the facility from sabotage. It must include the design criteria, the design bases for those criteria, and information on materials of construction, equipment, general arrangement, and proposed QA programs sufficient to provide reasonable assurance that the final security system will conform to those design bases.

This information will be reviewed by the NRC Safeguards licensing staff in order to ensure that the design for physical security will provide an adequate level of protection of the licensed material.

Section 72.184(a) requires the submission of a safeguards contingency plan for dealing with threats and radiological sabotage, in conformance with § 73.40(b).

Section 72.184(b) requires that the licensee prepare and maintain safeguards contingency plan procedures in accordance with Appendix C to 10 CFR Part 73 for effecting the actions and decisions contained in the Responsibility Matrix of the licensee's safeguards contingency plan.

The safeguards contingency plan procedures must be retained as a record until the Commission terminates the license and any superseded portions of the procedures must be retained for 3 years after they were changed.

The safeguards contingency plan and procedures will be reviewed by the NRC staff to ensure that they provide an adequate level of protection against threats and industrial sabotage.

Section 72.186(a) specifies that a licensee desiring to make changes that would decrease the safeguards effectiveness of the physical security plan or certain parts of the safeguards contingency plan must first submit an application to the Commission for a license amendment.

Section 72.186(b) requires that the licensee maintain records of changes to these plans which do not decrease their safeguards effectiveness and which therefore require prior Commission approval, and that the licensee submit a report to NRC with a description of each such change within 2 months after the change. The records of changes must be maintained for 3 years.

The information contained in the applications, records and reports will be reviewed by the NRC staff to ensure that the plans will continue to afford an adequate level of protection of licensed material with the proposed or completed changes.

Section 72.192 requires that an applicant establish a program for training, proficiency testing, and certification of personnel. This program must be submitted to the Commission for approval with the license application.

This program will be reviewed by the NRC licensing staff to ensure that licensee personnel will be adequately trained and proficient in use of the equipment at the facility to provide for safe operation.

Section 72.206 requires that a representative for a State or an affected Indian tribe must include a statement of the basis for his or her authority to act in the representative capacity. This statement is needed to establish for the NRC record the authority of the person acting in a representative capacity.

Section 72.212(b)(1) requires that Part 50 licensees pursuing a general license as established in § 72.210 to store spent fuel in an ISFSI at its power reactor site notify NRC at least 90 days prior to first storage of spent fuel under the general license. The information will enable NRC to ensure that any necessary inspections are scheduled.

Section 72.212(b)(2) requires that a general licensee register the use of each cask with NRC no later than 30 days after using the cask to store spent fuel. Registration of cask use will enable NRC to schedule any necessary inspections and will permit NRC to maintain an independent record of use for each cask and licensee.

Section 72.212(b)(4) requires a general licensee applying changes authorized by an amended CoC to a previously loaded cask to register the use of each such cask with the NRC no later than 30 days after applying the changes authorized by the amended CoC. Registration of cask use enables the NRC to schedule any necessary inspections and will permit the NRC to maintain an independent record of use for each cask.

Section 72.212(b)(5) requires that general licensees perform written evaluations, prior to first use, which establish that (a) conditions in the CoC have been met, (b) cask storage pads and areas have been designed to adequately support the static and dynamic loads of the casks; and (c) the requirements of § 72.104 (regarding radioactive material in effluents, and direct radiation) have been met. A copy of the evaluation must be retained as a record until spent fuel is no longer stored under the general license. This evaluation is necessary to show that storage of spent fuel is in accordance with the CoC.

Section 72.212(b)(6) requires that the general licensee document the results of a review of the SAR to determine whether the licensee's site parameters are enveloped by the cask design capability. A copy of the SAR would be obtained from the cask vendor. The results would be documented in the evaluation performed under 72.212(b)(5). This review is needed to show that storage of spent fuel is in accordance with the CoC.

Section 72.212(b)(7) requires a general licensee to evaluate any changes to the site parameters determination and analyses as a result of an amended CoC. A copy of the evaluation must be retained as a record until spent fuel is no longer stored under the general license.

Section 72.212(b)(8) requires that a general licensee, prior to use of the general license, determine whether activities related to storage of spent fuel under the general license involve a change in the facility Technical Specifications or require a license amendment for the facility pursuant to Section 50.59(c)(2). Results of this determination must be documented in the evaluation made in Section 72.212(b)(5).

Section 72.212(b)(11) requires that the general licensee maintain a copy of the CoC, or amended CoC, and documents referenced in the certificate for each cask used for storage of spent fuel. The cask is an item that is important to safety and maintaining a copy permits the licensee and NRC inspectors to ensure that use of the cask is in compliance with conditions in the cask certificate.

Section 72.212(b)(12) requires that the historical cask record provided by the cask vendor pursuant to § 72.234(d) be maintained by the licensee until after the cask is decommissioned. The record will be used by NRC to confirm compliance with the certificate.

Section 72.212(b)(13) requires that the licensee conduct activities related to storage of spent fuel under the general license in accordance with written procedures. The written procedures must be retained until spent fuel is no longer stored under the general license. The procedures are used by the licensee to ensure that activities are conducted in accordance with Commission regulations.

Section 72.218(a) requires that there be notification regarding the program for the management of spent fuel at the reactor under 10 CFR 50.54(bb) which includes a plan for removal of the spent fuel stored under the general license from the reactor site.

Section 72.218(c) requires that Part 50 licensees send a copy of any notification regarding spent fuel management at the reactor pursuant to 10 CFR 50.54(bb) and any application for termination of the reactor operating license pursuant to 10 CFR 50.82 to the appropriate NRC Regional Office. The staff will review the information in these submittals in order to ensure that spent fuel stored under the general license is included in these plans and will be managed safely. Reporting requirements under Sections 50.54 and 50.82 have been previously approved under OMB Clearance Number 3150-0011.

Sections 72.230(a) and (b) require that an application be submitted to obtain approval of spent fuel storage cask designs. An SAR must also be included with the application. The information in the SAR will be reviewed by the NRC staff to determine whether there is reasonable assurance that use of these casks will provide adequate protection for public health and safety.

Section 72.232(d) requires that the cask vendor notify NRC at least 45 days before starting to fabricate casks under a CoC. This notification will allow NRC to arrange for inspection of initial cask fabrication and QA program implementation.

Section 72.234(d) requires that: (1) a cask vendor establish a record for each cask; (2) the record include the NRC CoC number; the cask model number and identification number; the date that cask fabrication was started and completed; certification that the cask was designed, fabricated, and tested under a QA program accepted by the NRC; certification that the cask was inspected for cracks, pinholes, uncontrolled voids, or other defects that could significantly reduce its confinement effectiveness; and the name and address of the cask user; and (3) the vendor provide the original record to the cask user and maintain a composite record for all casks shipped to users. The composite record must be sent to the Commission if the vendor permanently ceases production under a CoC. The original record is provided to the user so that the historical cask record can be properly maintained by the user. The composite record is made available to NRC for inspection to ensure that a complete historical record of all casks is available. Transmitting the composite record to the Commission if the vendor stops producing a particular cask or model or goes out of business will ensure continuity of cask records for safety purposes.

Section 72.234(e) requires that certificate holders and licensees using spent fuel storage casks shall ensure that the composite record required by paragraph Section 72.234(d) is available to the Commission for inspection.

Section 72.234(f) requires that cask vendors establish written procedures and tests prior to use of the casks. A copy of these procedures and tests must be provided to cask users to assist them in development of procedures for use of the casks. The procedures are retained for as long as the cask design is in use.

Section 72.236(k) requires that casks be conspicuously and durably marked. This is necessary to identify casks as containers for spent fuel and enable cask users to establish material control and inventory records. The marking must last for the life of the cask.

Section 72.240(a) requires that a certificate holder, a licensee using a spent fuel storage cask, or the representative of a licensee using a spent fuel storage cask apply for reapproval of the design of a spent fuel storage cask prior to expiration of the CoC.

Section 72.240(b) requires that an applicant for cask design reapproval must submit an application at least 30 days prior to expiration of the cask's CoC. The application must be accompanied by a SAR showing that the cask will continue to provide adequate confinement of radioactive material. The information in the SAR would be reviewed by the NRC staff to determine whether there is reasonable assurance that the type of cask will continue to provide adequate protection for public health and safety.

Section 72.240(c) requires that an applicant for cask design renewal must submit an application accompanied by a Safety Analysis Report (SAR). The previous requirement stated that the SAR may reference the original SAR for the cask design; however, the final rule adds requirements that the SAR must include: (1) design bases information as documented in the most recently updated FSAR, (2) a time-limited aging analysis, and (3) a description of the program for management of issues associated with aging. The information in the SAR is reviewed by the NRC staff to determine whether there is reasonable assurance that the type of cask will continue to provide adequate protection for public health and safety. The NRC estimates that this requirement affects four CoC holders, and expects to receive one cask design renewal over the three year period covered by this clearance.

Sections 72.242(a), (b), and (c) contain requirements on each certificate holder or applicant to maintain records and produce reports as required, to maintain them for the period specified by the appropriate regulation or CoC conditions, and stipulate the form under which they should be maintained. Section 72.242(d) requires each certificate holder to submit a written report to the NRC within 30 days of discovery of a design or fabrication deficiency, for any spent fuel storage cask which has been delivered to a licensee, when the design or fabrication deficiency affects the ability of structures, systems, and components important to safety to perform their intended safety function.

Section 72.244 requires a certificate holder to file an amendment application with the Commission whenever the certificate holder desires to amend the CoC. The application shall describe the changes desired and the reasons for such changes. This information is needed so NRC can determine whether the amendment can be issued without endangering public health and safety.

Section 72.248 requires filing of updates to FSARs by storage cask certificate holders 90 days after Commission approval of the cask design with updates filed every 24 months thereafter to reflect changes to the facility and procedures made by the CoC holder. If no changes are made, a letter so indicating is sufficient to satisfy the reporting requirement. This requirement also grants authority to CoC holders to make changes to the certified cask design without prior NRC approval, under specified conditions. Updates to the FSAR that include descriptions of the changes made under this authority are needed for NRC to maintain cognizance of the certified cask design as it is used at licensed facilities, and thus to assure public health and safety.

## APPENDIX B

LIST OF GUIDANCE DOCUMENTS ASSOCIATED WITH  
INFORMATION COLLECTIONS IN 10 CFR PART 72

| Document Title  | ADAMS Accession No./URL   |
|---|---|
| Regulatory Guide 3.48 – Standard Format and Content for the Safety Analysis Report for an Independent Spent Fuel Storage Installation or Monitored Retrievable Storage Installation (Dry Storage) | ML14154A440   |
| Regulatory Guide 3.50 – Standard Format and Content for a Specific License Application for an Independent Spent Fuel Storage Installation or Monitored Retrievable Storage Facility               | ML14043A080   |
| Regulatory Guide 3.62 – Standard Format and Content for the Safety Analysis Report for Onsite Storage of Spent Fuel Storage Casks   | ML14167A023   |
| NUREG 1536 – Standard Review Plan for Spent Fuel Dry Storage Systems at a General License Facility  | ML101040620   |
| NUREG 1567 – Standard Review Plan for Spent Fuel Dry Storage Facilities   | ML003686776   |
| SFST-Interim Staff Guidance (ISG)-2 – Fuel Retrievability   | ML16117A080   |
| SFST-ISG-5 – Confinement Evaluation   | <a href="https://www.nrc.gov/reading-rm/doc-collections/isg/isg-5R1.pdf">https://www.nrc.gov/reading-rm/doc-collections/isg/isg-5R1.pdf</a> |