

## Section 15

FINAL SUPPORTING STATEMENT  
FOR  
QUALITY ASSURANCE RECORDS  
10 CFR 50.54(a), 10 CFR 50.55(f), 10 CFR 50 Appendix A (Criteria 1),  
and 10 CFR 50 Appendix B

### DESCRIPTION OF THE INFORMATION COLLECTION

All nuclear power plant licensees are required to establish and maintain quality assurance (QA) records. 10 CFR 50.54(a) establishes conditions of the operating license for nuclear facilities. 10 CFR 50.55(f) addresses quality assurance program requirements for holders of construction permits. The NRC anticipates that 5 applications for new reactors will be received within the reporting period (Kepco DC, mPower DC, Westinghouse DC, Blue Castle ESP, and Clinch River CP). (10 CFR 52.83, applicable to new reactor applications, invokes the provisions of 10 CFR 50, including 10 CFR 50.55(f).) 10 CFR 50 Appendix A, General Design Criteria for Nuclear Plants, Criteria 1, requires maintenance of records of the design, fabrication, erection, and testing of structures, systems, and components important to safety throughout the life of the unit. Each nuclear power plant subject to the criteria in 10 CFR 50 Appendix B shall implement the quality assurance program described or referenced in the Safety Analysis Report for the facility. 10 CFR 50 Appendix B requires that sufficient records be maintained to furnish evidence of activities affecting quality. Items 1-14 below identify records that shall be maintained in accordance with the above regulations.

Quality assurance records associated with the activities listed below are used by the licensee, the National Board of Boiler and Pressure Vessel Inspectors, insurance companies, and the NRC in the review and confirmation of quality-related activities. Most States and all nuclear insurers require that the American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel (B&PV) Code (Section III) be used in the design, construction, testing and inspection of nuclear power reactors.

Appropriate records of the design, fabrication, erection and testing of structures, systems and components important to safety shall be maintained by the licensee throughout the life of the plant, including:

1. Management: QA plan, procedures, and instructions
2. Qualification and training of personnel
3. Design
4. Procurement, items identification/control, acceptance status
5. Special processes
6. Manufacture, installation/testing
7. Calibration
8. Handling, storage and shipping
9. Inspection, test, and operating status
10. Non-conformance, corrective action
11. Audits
12. Modification, maintenance, and repair
13. Operation
14. QA plans in support of Part 52 applications

## A. JUSTIFICATION

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

Licensee burden hours are spent on development and maintenance of QA records for the items required by the regulations cited under the parts identified above. Appendix B requires that records be maintained for activities affecting structures, systems, and components designated as "safety-related." Appendix A requires records to be maintained for structures, systems, and components designated as "important-to-safety." These records provide evidence that activities affecting quality have been accomplished in accordance with NRC regulations and are available for NRC inspection and audit. Estimated burden hours are inclusive of Appendix A and B records.

Guidance for the types of records to be maintained for the design and construction phase of nuclear power plants is provided by Regulatory Guide 1.28 (Rev. 4), "Quality Assurance Program Requirements (Design and Construction)." Guidance for the types of records to be maintained for the operating phase is provided by Guide 1.33 (Rev 2), "Quality Assurance Program Requirements (Operation)," which includes records such as operating logs, maintenance and modification procedures, and related inspection results.

Maintenance of a QA program description is a license condition for both the construction and operation phases of a nuclear power plant. Like other license conditions, the description must be maintained current after it has been accepted by the NRC. It is estimated that a licensee/applicant will make one change to the QA program description per year. The burden for Current Licensing Basis (CLB) changes, including changes to the QA program description, are included in the total license amendment requests in Section 1.

### 2. Agency Use of Information

Records to be maintained by licensees are specified in the license application, license condition, or NRC-approved documents. These records, some of which will be kept for the life of the facility, must be available for NRC inspection to ascertain whether activities affecting quality have been accomplished in accordance with NRC requirements. Also, in case of the malfunction or failure of an item affecting safety, plant records must be available to aid in the determination of the cause of the failure. In addition, records are maintained for other important functions, such as providing baseline data for inservice inspection, and data for trend analyses.

### 3. Reduction of Burden Through Information Technology

There are no legal obstacles to reducing the burden associated with this information collection. The NRC encourages respondents to use information technology when it would be beneficial to them. NRC issued a regulation on October 10, 2003 (68 FR 58791), consistent with the Government Paperwork Elimination Act, which allows its licensees, vendors, applicants, and members of the public the option to make submissions electronically via CD-ROM, e-mail, special Web-based interface or other means. It is estimated that approximately

90% of the potential responses will be filed electronically.

4. Effort to Identify Duplication and Use Similar Information

No sources of similar information are available. There is no duplication of requirements. NRC has in place an ongoing program to examine all information collections with the goal of eliminating all duplication and/or unnecessary information collections.

5. Effort to Reduce Small Business Burden

These provisions do not affect small businesses.

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

Quality assurance records are collected as generated during plant design, construction, operation, and decommissioning. These records must be collected and maintained by the licensee throughout the life of the plant to ensure sufficient records are being maintained to furnish evidence of activities affecting quality assurance programs. Less frequent collection is not an alternative and does not support the NRC's mission of protection of public health and safety.

7. Circumstances which Justify Variation from OMB Guidelines

Pursuant to NRC Regulatory Guides 1.28 (Rev.4) and 1.33 (Rev.2), design, fabrication, erection and testing of structures, systems and components important to safety must be retained for the life of the plant in order to support the review and confirmation of safety-related activities.

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 May 14, 2013 (78 FR 28244). No comments were received.

9. Payment or Gift to Respondents

Not applicable.

10. Confidentiality of the 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, such information is normally not requested.

11. Justification for Sensitive Questions

No sensitive questions are involved.

12. Estimated Industry Burden and Burden Hour Cost

The burden estimate for this collection of information is based upon actual past reporting and recordkeeping figures. It is estimated that each of the 104 current operating licensees, 1 construction permit holder, and 4 COL holder will make one change to the Quality Assurance program per year. Appropriate records of the design, fabrication, and testing of structures, systems, and components important to the safety of the plant shall be maintained by the licensee throughout the life of the plant.

a. Estimated Annual Reporting Burden

Each of 104 licensees expend 160 burden hours per report, reporting changes to the QA Programs (104 x 1 x 160)	16,640 hrs/yr
Each of 5 plants under construction expend 160 burden Hours per report, reporting changes to the QA programs (5 x 1 x 160)	800 hrs/yr
Licensee burden for 5 Part 52 applications is 3,333 hours (5 x 2,000) /3	<u>3,333hrs/yr</u>
Total Reporting Hours:	20,773 hrs/yr

a. Estimated Recordkeeping Burden

Licensee burden for 104 operating reactors, plus 5 reactors under construction is 10,000 hours (109 x 10,000)	1,090,000 hrs/yr
Licensee burden for 14 permanently shutdown reactors is 2,500 hours (14 x 2,500)	<u>35,000 hrs/yr</u>
Total Recordkeeping Hours:	1,125,000 hrs/yr

1. Total Burden and Cost

1,145,773 hrs/yr (20,773 hrs/yr + 1,125,000 hrs/yr) @ \$274/hr = \$313,941,802

The estimated cost per burden hour is based upon NRC=s annual fee recovery rate, as published in NRC=s annual fee recovery rule.

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 1,125,000 hours, the storage cost for this clearance is \$123,300

(1,125,000 hours x 0.0004 x \$274/hour).

14. Estimated Annualized Cost to the Federal Government

QA records are generated and maintained by licensees. The incremental cost to the NRC of auditing and inspecting QA records is small with respect to the NRC inspection program, which includes resident inspections, regional inspections, and special inspections. Based on NRC staff experience, the hours associated with NRC review of records is estimated as 333 hours/operating reactor and 83 hours/permanently shutdown reactor, for a total of 35,794 hours (333 hrs x 104 + 83 hrs x 14). The NRC staff burden to review changes to licensee QA plans is estimated as 3,120 hours (30 hrs x 104). The NRC staff burden to review licensee QA plans associated with the 5 new reactor applications anticipated during this clearance period is estimated as 3,450 hours (690 x 5) annually.

Therefore, the estimated total Federal cost is \$11,607,736 (\$274/hr x 42,364 (35,794 + 3,120 + 3,450) hours).

The estimated cost per burden hour is based upon NRC's annual fee recovery rate, as published in NRC's annual fee recovery rule 10 CFR Part 170 and/or 10 CFR 171.

15. Reasons for Change in Burden or Cost

The overall licensee burden has increased 52,133 hours from 1,093,640 hours to 1,145,773 hours. This change is due to the number of new reactor applications expected from industry during the clearance period. During the previous cycle (2010-2013), the NRC anticipated receiving 3 combined license applications. For this clearance period (2013-2016), the NRC anticipates receiving 5 new reactor applications. This will add 800 hours for reporting changes; 1,333 hours annually per application; and 50,000 hours in recordkeeping. The overall licensee cost has increased with the additional applications and change in the fee rate from \$257 to \$274.

16. Publication for Statistical Use

The collected information is not published for statistical purposes.

17. Reason for Not Displaying the Expiration Date

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

18. Exceptions to the Certification Statement

None.

B. COLLECTIONS OF INFORMATION EMPLOYING STATISTICAL METHODS

Not applicable.