# DRAFT SUPPORTING STATEMENT FOR REPORTING SIGNIFICANT DESIGN AND CONSTRUCTION DEFICIENCIES

10 CFR 50.55(e)

# **DESCRIPTION OF THE INFORMATION COLLECTION**

10 CFR 50.55(e) requires that construction permit (CP) holders promptly identify and report deficiencies constituting a substantial safety hazard to the Commission via telephone or facsimile within 2 days of receipt of such information by a director or responsible officer. A written report is to follow within 30 days. The provisions of 10 CFR 50.55(e) also apply to applicants under 10 CFR 52 for holders of early site permits, design certifications, and combined operating licenses.

#### A. JUSTIFICATION

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

10 CFR 50.55(e) establishes requirements for reporting deficiencies occurring during the design and construction of nuclear power plants. The regulation is designed to enable the NRC to receive prompt notification of deficiencies and to have timely information on which to base an evaluation of the potential safety consequences of the deficiency and determine whether regulatory action is required. Therefore, the holder of a permit for the construction of a nuclear power plant is required to notify the Commission of each significant deficiency found in design and construction, which if it were to remain uncorrected, could adversely affect the safety of operations of the nuclear power plant at any time throughout the expected lifetime of the plant.

10 CFR 50.55(e)(1)(i) requires each CP holder to adopt appropriate procedures to evaluate deviations and failures to comply to identify defects and failures to comply associated with substantial safety hazards as soon as practicable, and, except as provided in 10 CFR 50.55(e)(1)(ii), in all cases within 60 days of discovery, in order to identify a reportable defect or failure to comply that could create a substantial safety hazard.

10 CFR 50.55(e)(1)(ii) requires that if the evaluation required by 50.55(e)(1)(i) cannot be completed within 60 days of discovery, an interim report is prepared and submitted to the Commission. The interim report should describe the deviation or failure to comply that is being evaluated and should also state when the evaluation will be completed. The interim report must be submitted in writing within 60 days of discovery of the deviation or failure to comply.

10 CFR 50.55(e)(1)(iii) requires that a director or responsible officer of a CP holder is informed within 5 working days after completion of the evaluation described above, if the construction of a facility or activity, or a basic component supplied for such facility or activity fails to comply with the Atomic Energy Act of

1954, as amended (the Act), or any applicable rule, regulation, order, or license of the Commission relating to a substantial safety hazard; contains a defect; or undergoes any significant breakdown in any portion of the quality assurance program required by 10 CFR 50 Appendix B that could have produced a defect in a basic component. Such breakdowns in the QA program are reportable whether or not the breakdown actually resulted in a defect in a design approved and released for construction or installation.

10 CFR 50.55(e)(2) requires a CP holder to notify the Commission, through a director or responsible officer or designated person, of information reasonably indicating that the facility fails to comply with the Act or any applicable rule, regulation, order, or license of the Commission relating to a substantial safety hazard.

10 CFR 50.55(e)(3) requires a CP holder to notify the Commission, through a director or responsible officer or designated person, of information reasonably indicating the existence of any construction defect or any defect found in the final design of a facility as approved and released for construction.

10 CFR 50.55(e)(4) requires a CP holder to notify the Commission, through a director or responsible officer or designated person, of information reasonably indicating any significant breakdown in the QA program.

10 CFR 50.55(e)(6)(i) requires notifications, as required by paragraphs (e)(2), (3) and (4) above, to be made initially by facsimile or by telephone within 2 days following receipt of information by the director or responsible corporate officer. This does not apply to interim reports described in 10 CFR 50.55(e)(1)(ii). Verification that the facsimile has been received should be made by telephone.

10 CFR 50.55(e)(6)(ii) requires notifications, as specified above, to also be made in writing, with copies to the appropriate Regional Administrator and to the appropriate NRC resident inspector, within 30 days following receipt of information by the director or responsible corporate officer.

10 CFR 50.55(e)(8) requires that the notification, required by 10 CFR 50.55(e)(6)(ii), clearly indicate that it is being submitted under 10 CFR 50.55(e) and includes, to the extent known, the name and address of the individual(s) informing the Commission; identification of the facility, the activity or the basic component supplied for the facility or the activity within the U.S. which contains a defect or fails to comply; identification of the firm constructing the facility or supplying the basic component which fails to comply or contains a defect; nature of the defect or failure to comply and the safety hazard which is created or could be created by such defect or failure to comply; the date on which the information of such defect or failure to comply was obtained; in the case of a basic component which contains a defect or fails to comply, the number and location of all the components in use at the facility; the corrective action which has been, is being, or will be taken, the name of the individual or organization responsible for the action, and the length of time that has been or will be taken to complete the action; and any advice related to the defect or failure to comply about the facility, activity, or basic component that has been, is being, or will be given to other

entities.

10 CFR 50.55(e)(9)(i) requires a CP holder to retain procurement documents (records) defining the requirements that facilities or basic components must meet for the lifetime of the basic component.

10 CFR 50.55(e)(9)(ii) requires a CP holder to retain records of evaluations of deviations and failures to comply for 5 years from the date of the evaluation.

10 CFR 50.55(e)(10) specifies that the reporting requirements of 10 CFR 50.55(e) are satisfied when the defect or failure to comply associated with a substantial safety hazard has been previously reported under 10 CFR 21, 10 CFR 50.55(e), 10 CFR 50.71 or 10 CFR 73.73. For holders of construction permits issued prior to October 29, 1991, evaluation, reporting, and recordkeeping requirements of 10 CFR 50.55(e) may be met by complying with the comparable requirements of 10 CFR 21. The burden is included in 10 CFR 21 (3150-0035) or NRC Form 366 (3150-0104).

# 2. Agency Use of Information

Specific uses made of the data reported under 10 CFR 50.55(e) include evaluation of the impact of the deficiency on the quality of construction and of the adequacy of planned corrective action, identification of generic problems, planning of actions by inspection and enforcement personnel, and identification of problems in management or implementation of the QA program.

#### 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 are filed electronically.

#### 4. Effort to Identify Duplication and Use Similar Information

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. <u>Consequences to Federal Program or Policy Activities if the Collection is Not Conducted or is Conducted Less Frequently</u>

Reporting of defects or failures to comply at the reporting period specified by the regulations is necessary for the Commission to make timely determinations on the potential safety consequences of the deficiency and whether regulatory action is required.

# 7. <u>Circumstances Which Justify Variation from OMB Guidelines</u>

Records are required to be retained longer than the OMB established 3-year retention period because operating experience has demonstrated that a 5-year retention period is necessary in order to evaluate the adequacy of the evaluation and correction of recurring defects. Procurement documents are retained for the lifetime of the components, a standard industry practice. Review of documented component characteristics and performance history must be available for review as needed. The two-day initial notification required by 10 CFR 50.55(e)(6)(i) provides the NRC with advance notice of potentially generic defects, substantial safety hazards, or significant breakdowns in QA programs, which could affect operating facilities.

#### 8. Consultations Outside the NRC

The opportunity for public comment on this information collection has been published in the <u>Federal Register</u>.

# 9. Payment or Gift to Respondents

Not applicable.

# 10. <u>Confidentiality of Information</u>

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

#### 11. Justification for Sensitive Questions

Sensitive information is not requested by these regulations.

# 12. Estimated Industry Burden and Burden Hour Cost

The regulations at 10 CFR 50.55(e)(6)(i), 10 CFR 50.55(e)(1)(ii), and 10 CFR 50.55(e)(6)(ii) define the substantive reporting requirements. The regulations at 10 CFR 50.55(e)(2), (3), and (4) are descriptive of the type of deficiencies to be reported. The regulation at 10 CFR 50.55(e)(8) describes specific information to be included in the reports and has no associated burden. The regulation was amended in 1991 to add 10 CFR 50.55(e)(10) as a burden-reduction measure to reduce duplication of evaluation and reporting and is, therefore, not identified as a burden.

| ANNUAL REPORTING BURDEN                 |                    |                                |                    |                               |             |  |  |
|---|--------------------|--------------------------------|--------------------|-------------------------------|-------------|--|--|
| Section 50.55(e)                        | No.<br>Respondents | Responses<br>per<br>Respondent | Total<br>Responses | Burden<br>Hours per<br>Report | Total Hours |  |  |
| Initial notification:<br>50.55(e)(6)(i) | 6                  | 2                              | 12                 | 10                            | 120         |  |  |
| Interim report:<br>50.55(e)(1)(ii)      | 6                  | 0                              | 0                  | 20                            | 0           |  |  |
| Follow-up report:<br>50.55(e)(6)(ii)    | 6                  | 2                              | 12                 | 70                            | 840         |  |  |
| TOTAL                                   |                    |                                | 24                 |                               | 960         |  |  |

Total Reporting Burden Hours: 960 hours

Total Reporting Burden Hour Cost: \$208,320 [@ \$217/hr]

The following table provides estimates of the annual recordkeeping burden associated with the regulation at 10 CFR 50.55(e)(9)(ii). Procedures, addressed under 10 CFR 50.55(e)(1)(i), are developed and retained as part of the application by holders of permits, certifications, and licenses and are not included in the recordkeeping burden associated with 10 CFR 50.55(e). As discussed under item 7 above, procurement documents addressed under 10 CFR 50.55(e)(9)(i), are retained in accordance with standard industry practice and, therefore, are not included in the recordkeeping burden associated with 10 CFR 50.55(e).

| ANNUAL RECORDKEEPING BURDEN               |                             |                                     |                                 |                     |  |  |  |  |
|---|-----------------------------|-------------------------------------|---------------------------------|---------------------|--|--|--|--|
|   | Number of<br>Recordkeepers* | Burden Hours<br>per<br>Recordkeeper | Total Annual<br>Burden<br>Hours | Retention<br>Period |  |  |  |  |
| Retention of evaluations: 50.55(e)(9)(ii) | 12                          | 2                                   | 24                              | 5 years             |  |  |  |  |

\*6 in year 1 + 12 in year 2 + 18 in year 3 = 36; 36/3 = 12 annually

Total Responses: 24

Total Annual Respondents: 6

Total Recordkeeping Burden Hours: 24 hours

Total Recordkeeping Burden Hour Cost: \$5,208 [@ \$217/hr]

Total Burden: 984 hours (960 + 24 hours)

#### 13. Estimate of Other Additional Costs

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 .0004

times the recordkeeping burden cost. Therefore, the storage cost for this clearance is estimated to be \$2.08 (24 hours x \$217 x .0004) and is insignificant.

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

| ANNUAL REVIEW BURDEN                    |                    |                                |                    |                               |             |  |  |  |
|---|--------------------|--------------------------------|--------------------|-------------------------------|-------------|--|--|--|
| Section 50.55(e)                        | No.<br>Respondents | Responses<br>per<br>Respondent | Total<br>Responses | Burden<br>Hours per<br>Report | Total Hours |  |  |  |
| Initial notification:<br>50.55(e)(6)(i) | 6                  | 2                              | 12                 | 10                            | 120         |  |  |  |
| Interim report:<br>50.55(e)(1)(ii)      | 6                  | 0                              | 0                  | 10                            | 0           |  |  |  |
| Follow-up report:<br>50.55(e)(6)(ii)    | 6                  | 2                              | 12                 | 20                            | 240         |  |  |  |
| TOTAL                                   |                    |                                | 24                 |                               | 360         |  |  |  |

Total Review Burden Hours: 360 hours

Total Review Burden Hour Cost: \$78,120 [@ \$217/hr]

# 15. Reasons for Changes in Burden or Cost

During the previous reporting period, there were no active construction permits. The burden increase reflects reports filed by 10 CFR 52 applicants associated with design and construction of new nuclear power plants. The cost estimates reflect an increase in base burden rates from \$156 to \$217/hour.

#### 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. <u>Exceptions to the Certification Statement</u>

None.

#### B. COLLECTIONS OF INFORMATION EMPLOYING STATISTICAL METHODS

Not applicable.