# SUPPORTING STATEMENT FOR 10 CFR PARTS 50 AND 52 ENHANCEMENTS TO EMERGENCY PREPAREDNESS REGULATIONS

#### Description of the Information Collection

The U.S. Nuclear Regulatory Commission (NRC) regulations in 10 CFR 50.47, 50.54, and 52.79, and 10 CFR Part 50, Appendix E, prescribe requirements for emergency preparedness (EP) plans and coordination in protecting nuclear power reactors, non-power reactors, and the surrounding community against consequences resulting from accidents and hostile action. The final rule contains reporting and recordkeeping requirements, including those for third parties, which are necessary to help ensure that an adequate level of EP is attained by nuclear power reactor licensees, non-power reactors, and the surrounding community. This revision addresses changes in information collections contained in the final rule, "Enhancements to Emergency Preparedness Regulations." Specifically, the final rule results in changes to information collection requirements in §§ 50.47, 50.54, and 10 CFR Part 50, Appendix E.

Following the terrorist attacks of September 11, 2001, the NRC staff evaluated the EP planning basis given the resulting threat environment and concluded that it remained valid. However, the NRC staff recognized that security events differ from accidental events and that the EP regulations and guidance could be enhanced in this and other respects. Advances in communication technologies and lessons learned through EP program implementation have revealed the benefit in providing clarity and enhancements to EP regulations and guidance.

While licensees have implemented significant enhancements to their EP programs in response to the February 25, 2002, Commission Order, NRC Bulletin 2005-02, and various NRC generic communications, the current regulations do not encompass these elements. The rulemaking: (1) codifies EP requirements imposed by Commission order after the terrorist attacks of September 11, 2001, as modified based upon experience and insights gained by the NRC during implementation, (2) codifies certain EP and response enhancements discussed within NRC Bulletin 2005-02, and (3) adds several new requirements that resulted from NRC staff review of EP regulations and guidance.

The operating nuclear power reactors that are affected by this rulemaking are located at 65 sites, with each facility consisting of one or more reactor unit(s). In general, EP is addressed in a site-specific manner because it is dependent on the physical layout of the entire site. As a result, this supporting statement estimates the burden associated with reporting and recordkeeping for these 65 sites. In addition, operating non-power reactors are affected by one of the regulatory initiatives included in this rulemaking. There are 32 operating non-power reactor sites. Therefore, this supporting statement also estimates the burden associated with reporting and recordkeeping for these additional 32 sites.

#### A. JUSTIFICATION

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

In general, the reports and records fall into one of two categories and are necessary for the reasons stated below:

- a) Information describing the content and planned operation of the licensee's facility in the event of an emergent and hazardous situation. This information is essential to enable the NRC to make a determination as to the adequacy of the licensee's program to meet regulatory requirements and protect the health and safety of the surrounding public, emergency workers, and the environment.
- b) Information describing the third party interactions and relations in fulfillment of NRC's obligation to the health and safety of the public, emergency workers, and the environment. The information sharing and cooperation are essential to prevent and quickly act in the event of an emergent and hazardous situation.

Specific requirements for reports and records in the amendments to Part 50 are identified below.

Section 50.47(b)(10) requires nuclear power reactor licensees to review and update their existing evacuation time estimates (ETEs) on a periodic basis. As a result, licensees must revise their existing procedures to account for this new requirement (this one-time recordkeeping burden is listed in Table 1). The new rule language also requires licensees to periodically update their ETEs (NRC assumes every 10 years). The burden associated with periodically revising and maintaining ETEs is listed as an annualized recordkeeping burden in Table 2. In addition, licensees must submit these updated ETEs to NRC for review to confirm adequacy. This annual reporting burden is listed in Table 3. NRC also assumes that each licensee will provide stakeholder groups, such as state and local government agencies, with the updated ETE for their review (six stakeholder groups per site x 65 sites = 390 third parties; see Table 4).

Section 50.54(q)(4) defines the process by which a nuclear power reactor licensee or a non-power reactor licensee would request prior approval of a change to the emergency plan that the licensee has determined constitutes a reduction in effectiveness of the plan. The new rule language states that licensees pursuing such changes would be required to apply for an amendment to the license as provided in § 50.90. Nuclear power reactors and non-power reactors may need to revise existing procedures and training documents to clarify the process for emergency plan changes (listed as a one-time recordkeeping burden in Table 1). In addition, the NRC estimates that 12 nuclear power reactor sites per year will submit to NRC license amendments for emergency plan changes that result in a reduction in effectiveness. The annualized reporting burden for these license amendment submittals is listed in Table 3.

Section 50.54(q)(5) requires nuclear power reactor licensees and non-power reactors to retain a record of all changes to the emergency plans made without prior NRC approval for a period of three years from the date of the change. Table 2 contains the annual recordkeeping burden associated with this section of the final rule. The section also requires nuclear power reactors and non-power reactors to submit a summary report of each emergency plan change, including its evaluation, within 30 days of the change. Table 3 lists the annualized reporting burden associated with this section of the final rule. The NRC estimates that only nuclear power reactor licensees will make changes to their emergency plans, and that each site will submit one analysis of emergency plan changes per year to NRC.

Section 50.54(q)(6) requires nuclear power reactor licensees and non-power reactors to retain the emergency plan and each change for which prior NRC approval was obtained pursuant to § 50.54(q)(4) as a record until the Commission terminates the license. Table 2 lists the annual recordkeeping burden associated with this rule requirement.

Appendix E, Section IV. Introduction requires nuclear power reactor licensees to periodically revise their ETEs to reflect demographic changes that occur within the emergency planning zone (EPZ). The recordkeeping burden associated with this rule requirement is described and shown under § 50.47(b)(10) in Tables 1 and 2.

Appendix E, Section IV.A.7. requires nuclear power reactor licensees to identify offsite response organization (ORO) resources, such as local law enforcement, firefighting, and medical services, and the assistance each organization would provide, for responding to an emergency at the plant site, including an event involving hostile action. Under the final rule language, licensees may need to revise existing or obtain new agreements with ORO resources (listed as a one-time recordkeeping burden in Table 1). This analysis also assumes that each licensee will need to interface with Federal, State, and local government agencies regarding the availability of resources. As a result, NRC assumes that these third parties (one Federal, one State, and one local agency per site x 65 sites = 195 third parties) will need to report to the licensee on the availability of resources (see Table 4).

Appendix E, Section IV.A.9. requires nuclear power reactor licensees to conduct a detailed analysis demonstrating that on-shift personnel assigned emergency plan implementation functions are not assigned any responsibilities that would prevent them from performing their assigned emergency plan functions when needed. To comply with this new requirement, licensees may need to revise their procedures, emergency plan, and training documents (listed as a one-time recordkeeping burden in Table 1).

Appendix E, Section IV.C.2. requires nuclear power plant licensees to establish and maintain the capability to assess, classify, and declare an emergency condition within 15 minutes of receiving indications that an emergency action level has been exceeded and promptly declare the emergency condition as soon as possible following a determination that an emergency action level has been exceeded. The final rule language requires nuclear power plant licensees to

revise existing procedures and training documents (listed as a one-time recordkeeping burden in Table 1).

Appendix E, Section IV.D.3. requires licensees, in conjunction with the responsible offsite authorities, to demonstrate that the primary alert and notification system (ANS) includes a backup means of alert and notification in the event that the primary ANS is unavailable. The final rule language requires licensees to revise existing administrative controls, maintenance procedures, training, and testing programs (listed as a one-time recordkeeping burden in Table 1). This analysis also assumes that each licensee will need to interface with Federal, State, and local government agencies regarding the backup ANS methods. As a result, NRC assumes that these third parties (one Federal, one State, and one local agency per site x 65 sites = 195 third parties) will need to document licensee changes to alerting and notification systems (see Table 4).

Appendix E, Section IV.E.8.d. requires licensees or applicants to identify alternative facilities to function as staging areas for augmentation of emergency response organization (ERO) staff during hostile action. To implement this new requirement, licensees must revise their procedures, emergency plan, and training documents to comply with the final rule language. Table 1 contains the burden associated with these one-time recordkeeping activities.

Appendix E, Section IV.F.2.a. requires licensees to submit, for NRC review and verification, exercise scenarios for full participation exercises. NRC assumes that licensees will conduct certain activities, such as updating their emergency plans, upfront to comply with the final rule language. Table 1 contains the burden associated with this one-time recordkeeping activity. In addition, NRC assumes that licensees will submit revised exercise scenarios to NRC for review and verification once every two years, on average. Table 4 contains the burden associated with this annual reporting activity.

Appendix E, Section IV.F.2.b. requires licensees to submit, for NRC review and verification, scenarios for their onsite biennial exercises. In addition, the licensee must ensure that adequate emergency response capabilities are maintained during the interval between biennial exercises by conducting drills, including at least one drill involving a combination of some of the principal functional areas of the licensee's onsite emergency response capabilities. The one-time recordkeeping and reporting burdens associated with this final rule requirement are described and shown under Appendix E, Section IV.F.2.a.

Appendix E, Section IV.F.2.j. requires licensees to maintain a record of exercises conducted during each eight-year exercise planning cycle to document and track compliance with the drill and exercise requirements. Table 2 contains the burden associated with this annual recordkeeping activity.

Appendix E, Section IV.I. requires licensees to provide an expanded range of protective measures for onsite personnel that would be appropriate for protection against hostile action. Licensees must revise their existing protective measures, procedures, emergency plan, and training documents to comply with the final rule language. Table 1 contains the burden associated with these one-time recordkeeping activities.

#### 2. Agency Use of the Information

The information included in the applications, reports, and records is reviewed by the NRC staff to assess the adequacy of the applicant's physical plant, equipment, organization, training, experience, procedures, and plans to protect nuclear power reactors, non-power reactors, and the surrounding community against radiological consequences resulting from accidents or sabotage.

#### 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 2 percent 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

The NRC has determined that the affected entities are not small entities or businesses as those terms are used in the Regulatory Flexibility Act.

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

If the information were not collected, or collected less frequently, the NRC could be unaware for extended periods of time whether the existing or revised emergency plans are adequate to protect the health and safety of the public, and the environment. Without a timely review of information, changes to personnel, procedures, equipment, or facilities, or the failure to maintain an effective emergency plan could adversely affect emergency preparedness and response, without NRC imposing required corrective measures.

#### 7. Circumstances which Justify Variations from OMB Guidelines

10 CFR 50.54(q) requires that the licensee retain the emergency plan, and each change that reduces the effectiveness of the plan, as a record until the Commission terminates the license, which is initially issued for 40 years.

#### 8. Consultations Outside the NRC

During the development of the rule language, the NRC staff provided the public an opportunity to comment on the preliminary rule language as published in the *Federal Register* on March 12, 2008 (73 FR 13157). The NRC staff also held a public meeting on July 8, 2008, to discuss public comments received to date on the draft preliminary rule language.

The NRC published the proposed rule on the enhancements to EP regulations for public comment in the *Federal Register* on May 18, 2009 (74 FR 23254). The NRC received several requests for extending the public comment period, and the public comment period was extended from August 3, 2009 to October 19, 2009. During the public comment period for the proposed rule, NRC and FEMA held 12 public meetings to discuss the proposed rule and related guidance documents. In all, the NRC received 94 comment submissions.

The NRC received several comments during the public comment period that addressed topics related to the proposed information collection requirements.

- ETE Updating: Several commenters suggested that NRC address ETE updating in guidance rather than regulation. In the final rule, the NRC maintained the regulatory requirement but, based on other comments, did revise the population change threshold for additional ETE updates from a 10 percent population change to a 25 percent or 30 minute change in the longest ETE value for the 2-mile zone or 5-mile zone, including all affected Emergency Response Planning Areas, or for the entire 10-mile EPZ.
- Changes to the Emergency Plan Resulting in a Reduction in Effectiveness: Stakeholders suggested that NRC approval should only be necessary for changes that will result in a "significant" reduction in effectiveness. NRC concluded that a change in emergency plan resulting in any degree of reduction in effectiveness warrants prior NRC review. With regard to the report required under § 50.54(q)(5), in response to comments, the NRC changed the final rule language to require licensees only to submit a summary report of each change made without prior NRC approval. In contrast, the proposed rule required the licensee to submit the evaluation that demonstrated the change did not reduce the effectiveness of the emergency plan.
- Coordination with OROs during Hostile Action: The NRC received several comments addressing coordination with OROs. In general, the commenters stated that this proposed requirement was unnecessary and duplicated existing efforts. The NRC disagreed with the commenters, and clarified the rule language to better explain the rulemaking's intent.
- On-Shift Multiple Responsibilities: In the proposed rule, NRC requested comments on a draft staffing table that licensees could implement as an alternative to providing a detailed staffing analysis. Several commenters supported the guidance provided in the staffing table. The final rule, however, requires all licensees to conduct a detailed staffing analysis as

was required under the proposed rule.

- <u>Emergency Declaration Timeliness</u>: NRC received several suggestions for revisions to this requirement, in particular regarding the appropriateness of a firm 15-minute declaration requirement. NRC determined that the proposed capability requirements were adequate, and did not make any revisions to the rule based on these comments.
- <u>Exercise Scenarios</u>: NRC received many suggestions regarding exercise scenario requirements, mainly regarding exercise content and exercise planning cycle length. A few commenters suggested that the exercise scenarios should be addressed through guidance rather than regulation. NRC determined that the rule requirements are necessary, but adjusted the exercise cycle length from six to eight years.

The detailed description of all comments and the NRC responses is provided in a supplemental document, as described in the *Federal Register* notice.

#### 9. Payment or Gift to Respondents

Not applicable.

#### 10. Confidentiality of Information

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

#### 11. Justification for Sensitive Questions

Questions of a sensitive nature and other matters that are commonly considered private, such as personal telephone numbers, are needed in the event of a nuclear emergency. This information is protected from public disclosure under the Privacy Act of 1974, as amended, and in accordance with 10 CFR 2.390.

#### 12. Estimate of Industry Burden and Cost

The burden associated with the information collections is given in Table 1 for one-time recordkeeping burden, Table 2 for annual recordkeeping burden, Table 3 for annual reporting burden, and Table 4 for third-party burden. Based on NRC staff's best estimate, the incremental burden to generate, maintain, retain, disclose, and provide information related to the radiological emergency planning activities covered by this final rule is estimated to total 117,252 hours with an annualized cost estimate of \$30,351,433 (117,187 hours x \$259 per hour). Of this total, approximately 89 percent (104,489 hours or \$27,062,651) of the burden is attributable to one-time activities due to implementation of the rule requirements. Therefore, the information collection burden will decrease by 89 percent once the one-time requirements have been completed.

#### 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 \$10,016 (96,687 recordkeeping hours x .0004 x \$259).

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

Table 5 describes the estimated annual cost to the NRC for administration of the reporting and recordkeeping requirements. The cost is fully recovered through fee assessments to NRC licensees pursuant to 10 CFR Parts 170 and/or 171. The total estimated cost to the government is estimated as \$815,073 (3,147 hours x \$259 per hour).

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

The estimated incremental recordkeeping and reporting burden of the final rule is 117,187 hours (96,687 hours recordkeeping from Tables 1 and 2, plus 1,975 hours reporting from Table 3, plus 18,525 hours third-party from Table 4). This estimate includes the one-time and annual requirements of the final rule. Of this, 85,964 hours are for one-time recordkeeping requirements (Table 1), and 18,525 hours are for one-time third-party requirements. Therefore, the burden increase will be reduced by approximately 89 percent once the one-time requirements have been completed. The final rule changes numerous information collection requirements in §§ 50.47, 50.54, and 10 CFR Part 50, Appendix E.

The factors that account for the increased burden include the following: The final rule requires licensees to (1) update ETEs on a periodic basis; (2) submit exercise scenarios to NRC for review and verification; (3) submit for NRC review and approval in accordance with 10 CFR 50.90 changes in emergency plans that would reduce the effectiveness of the plans; (4) coordinate with State, local, and Federal agencies regarding emergency response resources; and (5) develop procedures addressing protective measures for onsite personnel. The final rule contains these new provisions that include reporting and recordkeeping burdens that were not part of previous estimates.

#### 16. Publication for Statistical Use

This information will not be published for statistical use.

#### 17. Reason for Not Displaying the Expiration Date

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

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

There are no exceptions.

## B. <u>COLLECTION OF INFORMATION EMPLOYING STATISTICAL METHODS</u>

Statistical methods are not used in this collection of information.

Table 1
10 CFR Parts 50 Estimated One-Time Recordkeeping Industry Burden

| Section                       | No. of<br>Recordkeepers                       | No. of<br>Records per<br>Recordkeeper | Annualized<br>One-Time<br>Hours per<br>Recordkeeper | Total One-Time<br>Burden<br>(Hours) |  |
|-------------------------------|---|---------------------------------------|---|-------------------------------------|--|
| 50.47(b)(10)                  | 65  | 1                                     | 163   | 10,595                              |  |
| 50.54(q)(4)                   | 97  | 1                                     | 62  | 6,014                               |  |
| Appendix E, Section IV. Intro | Burden shown in 50.47(b)(10)                  |                                       |   |                                     |  |
| Appendix E, Section IV.A.7.   | 65  | 1                                     | 6   | 390                                 |  |
| Appendix E, Section IV.A.9.   | 65  | 1                                     | 287   | 18,655                              |  |
| Appendix E, Section IV.C.2.   | 65  | 1                                     | 13  | 845                                 |  |
| Appendix E, Section IV.D.3.   | 65  | 1                                     | 533   | 34,645                              |  |
| Appendix E, Section IV.E.8.d. | 65  | 1                                     | 61  | 3,965                               |  |
| Appendix E, Section IV.F.2.a. | 65  | 1                                     | 43  | 2,795                               |  |
| Appendix E, Section IV.F.2.b. | Burden shown in Appendix E, Section IV.F.2.a. |                                       |   |                                     |  |
| Appendix E, Section IV.I.     | 65  | 1                                     | 124   | 8,060                               |  |
| Total                         | 97  |                                       |   | 85,964                              |  |

Table 2
10 CFR Part 50 Estimated Annual Recordkeeping Industry Burden

| Section                       | No. of<br>Recordkeepers      | No. of<br>Records per<br>Recordkeeper | Annual Hours<br>per<br>Recordkeeper | Total Annual<br>Burden<br>(Hours) |  |
|-------------------------------|------------------------------|---------------------------------------|-------------------------------------|-----------------------------------|--|
| 50.47(b)(10)                  | 65                           | 1                                     | 111                                 | 7,215                             |  |
| 50.54(q)(5)                   | 97                           | 1                                     | 2                                   | 194                               |  |
| 50.54(q)(6)                   | 97                           | 1                                     | 2                                   | 194                               |  |
| Appendix E, Section IV. Intro | Burden shown in 50.47(b)(10) |                                       |                                     |                                   |  |
| Appendix E, Section IV.F.2.j. | 65                           | 1                                     | 48                                  | 3,120                             |  |
| Total                         | 97                           |                                       |                                     | 10,723                            |  |

Table 3

10 CFR Part 50 Estimated Annual Reporting Industry Burden

| Section                       | No. of<br>Respondents                           | Responses<br>per<br>Respondent | Number of<br>Responses | Burden Hours<br>per Response | Total<br>Annual<br>Burden<br>(Hours) |
|-------------------------------|---|--------------------------------|------------------------|------------------------------|--------------------------------------|
| 50.47(b)(10)                  | 65  | 1                              | 65                     | 1                            | 65                                   |
| 50.54(q)(4)                   | 12  | 1                              | 12                     | 40                           | 480                                  |
| 50.54(q)(5)                   | 65  | 1                              | 65                     | 2                            | 130                                  |
| Appendix E, Section IV.F.2.a. | 32.5  | 1                              | 32.5                   | 40                           | 1,300                                |
| Appendix E, Section IV.F.2.b. | . Burden shown in Appendix E, Section IV.F.2.a. |                                |                        |                              |                                      |
| Total                         | 65  |                                | 174.5                  | 83                           | 1,975                                |

Table 4
10 CFR Part 50 Estimated Annual Third-Party Burden

| Section                     | Number of<br>Responses | Burden<br>Hours per<br>Response | Total Annual<br>Burden<br>(Hours) |
|-----------------------------|------------------------|---------------------------------|-----------------------------------|
| 50.47(b)(10)                | 390                    | 12                              | 4,680                             |
| Appendix E, Section IV.A.7. | 195                    | 12                              | 2,340                             |
| Appendix E, Section IV.D.3. | 195                    | 59                              | 11,505                            |
| Total                       | 780                    |                                 | 18,525                            |

Number of responses: 954.5 (174.5 annual responses + 780 third-party)

Number of recordkeepers: 0 to 97 depending on the requirement

Recordkeeping Burden: 96,687 hours (85,964 hours annualized one-time + 10,723

hours annual recordkeeping burden)

Annual Reporting Burden: 1,975 hours

Third-Party Burden: 18,525 hours

Total Burden: 117,187 hours (96,687 hours recordkeeping + 1,975 hours reporting +

18,525 hours third-party)

Table 5
Annualized NRC Burden

| NRC Action   | No.<br>Actions/Year | Burden<br>Hours/Action | Total Hours |
|--|---------------------|------------------------|-------------|
| Review initial ETE updates                               | 21.7                | 56                     | 1,213       |
| Review ongoing ETE updates                               | 6.5                 | 56                     | 364         |
| Review biennial exercise submittals                      | 32.5                | 20                     | 650         |
| Participate in hearing process to evaluate reductions in |                     |                        |             |
| the effectiveness of emergency plans                     | 1                   | 920                    | 920         |
| Total  |                     |                        | 3,147       |