

DRAFT SUPPORTING STATEMENT
FOR

REQUEST FOR INFORMATION PURSUANT TO 10 CFR 50.54(f)
REGARDING RECOMMENDATIONS 2.1, 2.3 and 9.3, OF THE NEAR-TERM TASK FORCE
REVIEW OF INSIGHTS FROM THE FUKUSHIMA DAI-ICHI EVENT

(3150-0211)

EXTENSION

Description of the Information Collection

Title 10 of the *Code of Federal Regulations* (10 CFR) 50.54(f) of the NRC regulations provides that a licensee shall, upon request by the Commission, submit written statements under oath or affirmation to enable the Commission to determine whether a license should be modified, suspended, or revoked. When the NRC staff has identified a potential health, safety, environmental or security deficiency at a particular plant or series of plants, the staff may require a licensee or licensees to submit information to evaluate the particular situation and to make a determination whether the situation is serious enough to require that the Commission issue an Order to modify, revoke, or suspend the license to operate a nuclear reactor.

Following events at the Fukushima Dai-ichi nuclear power plant resulting from the March 11, 2011 Great Tōhoku Earthquake and subsequent tsunami, and in response to requirements contained in Section 402 of the Consolidated Appropriations Act (Public Law 112-074), the NRC received emergency clearance to issue letters to 104 power reactors licensees pursuant to 10 CFR 50.54(f). The information requested will included:

- Seismic and flooding hazard reevaluations to determine if further regulatory action is necessary
- Walkdowns to confirm compliance with the current licensing basis and provide input to the hazard reevaluations
- Analysis of the Emergency Preparedness capability with respect to staffing and communication ability during a prolonged multiunit event

The NRC requested emergency review of the information collection because this information was needed before the expiration of the normal time limits under the Office of Management and Budget's regulations at 5 CFR 1320.13 that implement the provisions of the Paperwork Reduction Act of 1995. This is necessary to ensure compliance with requirements in Section 402 of the Consolidated Appropriations Act for 2012 and the timelines set forth in the conference report for PL 112-74:

The conferees recognize the progress that the Nuclear Regulatory Commission has made on the recommendations of the Near Term Task Force. Commission staff has proposed a prioritized list of the Task Force recommendations that reflects the order regulatory actions are to be taken. The conferees direct the Commission to implement these recommendations consistent with, or more expeditiously than, the "schedules and milestones" proposed by NRC staff on October 3, 2011. The conferees direct the Commission to maintain an implementation schedule such that the remaining recommendations (not identified as Tier 1 priorities) will be evaluated and acted upon as

expeditiously as practicable. The conferees request that the Commission provide a written status report to the House and Senate Committees on Appropriations on its implementation of the Task Force recommendations on the one year anniversary of the Fukushima disaster.

The NRC could not comply with the normal clearance procedures because the use of normal clearance procedures is reasonably likely to prevent or disrupt the collection of information as stated in 5 CFR 1320.13(a)(2)(iii). The emergency clearance was approved on March 6, 2012.

The current request is for a three year clearance of the information collected in the 50.54(f) letters.

A. JUSTIFICATION

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

Protection from natural phenomena is critical for safe operation of nuclear power plants. Failure to protect structures, systems, and components important to safety from natural phenomena with appropriate safety margins has the potential to result in common-cause failures with significant consequences, as was demonstrated at Fukushima. Additionally, the consequences of an accident from some natural phenomena may be aggravated by a “cliff-edge” effect, in that a small increase in the hazard (e.g., flooding level) may sharply increase the number of structures, systems, and components affected.

Current NRC regulations and associated regulatory guidance provide a robust regulatory approach for the evaluation of site hazards associated with natural phenomena. However, this framework has evolved over time as new information regarding site hazards and their potential consequence has become available. As a result, the licensing basis, design, and level of protection from natural phenomena differ among the existing operating reactors in the United States, depending on when the plant was constructed and licensed for operation. Additionally, the assumptions and factors that were considered in determining the level of protection necessary at these sites vary depending on a number of contributing factors. To date, the NRC has not undertaken a comprehensive re-establishment of the design basis for existing plants to reflect the current state of knowledge or current licensing criteria.

As the state of knowledge of these hazards has evolved significantly since the licensing of many of the plants within the U.S., and given the demonstrated consequences from Fukushima, it is necessary to confirm the appropriateness of the hazards assumed for U.S. plants and their ability to protect against them.

In response to the events the Fukushima Dai-ichi nuclear power plant resulting from the March 11, 2011 Great Tōhoku Earthquake and subsequent tsunami, Congress directed the NRC in Section 402 of the Consolidated Appropriations Act (Public Law 112-074) to collect information from reactor licensees as described below:

The Nuclear Regulatory Commission shall require reactor licensees to re-evaluate the seismic, tsunami, flooding, and other external hazards at their sites against current applicable Commission requirements and guidance for such

licensees as expeditiously as possible, and thereafter when appropriate, as determined by the Commission, and require each licensee to respond to the Commission that the design basis for each reactor meets the requirements of its license, current applicable Commission requirements and guidance for such license. Based upon the evaluations conducted pursuant to this section and other information it deems relevant, the Commission shall require licensees to update the design basis for each reactor, if necessary.

In accordance with Commission direction, the information collection request includes the following:

General

- Confirmation of receipt of the 10 CFR 50.54(f) request within 30 days. The required response is a written statement, signed under oath or affirmation.
- Response indicating inability to comply with information request (60 days for emergency preparedness responses and 90 days for all other requests)

Hazard reevaluation

The reevaluation and related analysis will also serve to meet NRC's obligation under the Consolidated Appropriations Act for 2012 (Pub Law 112-74), Section 402, and also affords licensees the opportunity to inform the NRC regarding safety-related decisions.

- Submission of method for performing reevaluation and assessment of seismic and flooding hazards
- Submission of reevaluation of site seismic and flooding hazards
- Submission of an assessment of the impact on the plant of the reevaluated hazards

Walkdowns

The results from these walkdowns are expected to capture any degraded, non-conforming conditions, and cliff-edge effects for flooding so that they are addressed by the licensee's corrective action program.

- Submission of method for performing seismic and flooding walkdowns
- Submission report on seismic and flooding walkdowns

Emergency Preparedness (EP)

The accident at Fukushima reinforced the need for effective EP, the objective of which is to ensure the ability to implement effective measures to mitigate the consequences of a radiological emergency. In addition, the accident at Fukushima highlighted the need to determine the number and qualifications of staff to fill all necessary positions to respond to a multi-unit event. Finally, there is a need to ensure that the communication equipment relied upon to coordinate the event response during a prolonged station blackout can be powered.

- Submission of emergency preparedness communications assessment and draft and final assessments of staffing

The NRC staff are engaged with stakeholders in developing generic guidance for licensee responses to the information collections contained in the 50.54(f) letters. The NRC staff anticipates issuance, or endorsement, of guidance on the following schedule:

- Guidance on performing the walkdowns by May, 2012.
- Guidance on performing the reevaluations by November, 2012.
- Guidance on performing the EP evaluations by winter 2012.

2. Agency Use of Information

Using the information gathered by these information requests, the NRC will determine if additional regulatory action is necessary. This may include actions such as modifying the design basis hazard or ordering plant modifications for a plant if the NRC determines that the reevaluated hazard justifies such an action.

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. The NRC has an Electronic Information Exchange system that provides an electronic submission capability for NRC licensees to voluntarily submit documents electronically. This system provides certificates of authority for electronic signatures with licensees, contractors, and other Government organizations. It is estimated that approximately 65% of the potential responses are filed electronically.

4. Effort to Identify Duplication and Use Similar Information

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

The information request is based upon the lessons learned from the Fukushima accident. It requests licensees to perform reevaluations to modern standards and consider additional situations such as natural disasters that affect multiple units at once. This type of information or its analog is not currently available to the NRC.

5. Effort to Reduce Small Business Burden

None of the licensees responding to this collection are small businesses.

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

As described in the justification for this action, the NRC considers this information to be critical to its mission. The NRC finds that the current schedule is necessary to avoid unnecessary delay.

Additionally, as described in the justification for this action, the Consolidated Appropriations Act, Public Law 112-074, Section 402 requires a reevaluation of licensees' design basis for external hazards. The NRC considers that its implementation of Recommendation 2.1 and 2.3, which represent the vast majority of the burden, satisfy this requirement. The conference report associated with the Public Law indicated that the NRC should complete this activity in accordance with, or faster, than the schedule proposed in SECY-11-0137.

7. Circumstances Which Justify Variation from OMB Guidelines

Not Applicable

8. Consultations Outside the NRC

Opportunity for public comment on the emergency request for approval of information collection requirements for this clearance package was published in the Federal Register on February 24, 2012 (77 FR 11164). Opportunity for public comment on the renewal of the information collection requirements in this package has been published in the Federal Register.

Additionally, throughout the development of these letters, the NRC staff has solicited stakeholder input including feedback on the burden. The NRC staff made draft versions of the letters publically available and hosted seven public meetings to gather stakeholder feedback. Further, the Nuclear Energy Institute provided feedback to the NRC on the content of the letters, including the associated burden. The NRC staff considered all feedback in generating its burden estimate.

On February 22, 2012, draft versions of the 50.54(f) letters were made publicly available as part of a package provided to the NRC Commissioners on February 17th for Notation Vote. On February 28th, the Nuclear Energy Institute (NEI), the policy organization for the nuclear technologies industry, submitted a letter to Chairman Jaczko with comments on the proposed requirements in the 50.54(f) letters. Although this letter was not submitted in direct response to the FRN soliciting comment on these letters, the NRC staff is addressing the comments as part of the information collection submission. Following is a summary of NEI comments and NRC staff responses:

Comment #1. NEI expressed concern that the proposed timeframe for completing seismic reevaluations is not realistic, and licensees could not complete the assessment before the end of 2016.

NRC Staff Response. The timeframe proposed by the NRC staff for conducting seismic reevaluations is as follows:

- NRC issues guidance (November 2012)
- Risk assessment approach submitted 60 days after NRC issuance of guidance (January 2013)
- Seismic hazard reevaluation for CEUS licensees submitted 1.5 years from issuance of 50.54(f) letters (August 2013)

- Seismic hazard reevaluation for WUS licensees submitted 3 years from issuance of 50.54(f) letters (March 2015)
- Seismic risk assessment submitted for high priority plants 3 years after submission of seismic hazard evaluation (varies for CEUS and WUS licensees)
- Seismic risk assessment submitted for all other plants 4 years after submission of seismic hazard evaluation (varies for CEUS and WUS licensees)

The NRC staff recognizes that there is a limited pool of resources and agrees that it will be challenging to accomplish this task. However, the NRC staff considers that the proposed schedule is commensurate with the significance of this activity. To enhance the licensees' ability to meet the schedule, the NRC staff has built into the information request a prioritization scheme that will allow a staggered use of these resources. Additionally, we have constructed the information request to allow licensees to draw upon existing information where appropriate. As an example, the information request acknowledges that licensees may be able to draw upon information from their response Generic Letter 88-20, "Individual Plant Examination of External Events (IPEEE)," issued June 28, 1991. GL 88-20 requested that licensees report to the NRC all plant-specific vulnerabilities and, if necessary, take actions to address them. In contrast to the present information request, the IPEEE effort was less rigorous and more of a qualitative evaluation. The NRC staff, however, expects that significant efficiency can be gained by incorporating the IPEEE information where appropriate.

Additionally, the NRC staff notes that the Consolidated Appropriations Act (Public Law 112-074) directs the NRC to require these reviews and the associated Conference Report indicates that the NRC should take these actions in accordance with the schedules and milestones currently proposed by the information request.

Comment #2. NEI expressed concern that NRC's estimates for seismic reevaluations (5,200 hours) is too low, and suggested that an estimate between 15,000 and 30,000 hours is more accurate.

NRC Staff Response. The NRC staff acknowledges that performance of a seismic probabilistic risk assessment (SPRA) would require a large effort that, in some cases, could approach 15,000 to 30,000 hours. However, not every site will have to perform such resource intensive analysis. Where a site's reevaluated hazard is below the current design basis hazard, no additional information or effort is requested. Additionally, performance of an SPRA would only be requested in the event that the reevaluated hazard is significantly greater than the current design basis. The NRC staff has crafted the information request to allow for lower effort analyses (e.g., performance of a seismic margins analysis) in cases where the reevaluated hazard does not sufficiently exceed the design basis to warrant a full SPRA. The burden estimate that we generated tried to approximate these potential outcomes and average them across the industry. Following are the assumptions the NRC staff used in calculating the average burden per respondent for seismic reevaluations:

- 25% of licensees will need to perform an SPRA, which will require an average of 8,000 hours to perform. Although it's not clarified in the NEI comment, it appears that their estimate assumes no efficiency for existing information and guidance. The NRC staff used an estimate of 8,000 hours because sites have existing risk models that could be used to reduce the burden of performing an SPRA.
- 50% of licensees will perform a lesser analysis requiring 2,500 hours
- 25% of licensees will have no additional analyses to perform (0 hours)

The actual percentages of licensees falling into each category of analysis will be based upon the results of the seismic hazard reevaluations, submitted in year 1.5 (for CEUS plants) and year 3 (for WUS plants). In the next clearance cycle, the NRC staff will be able to further refine the estimates of plants requiring each type of analysis, based on the results of the seismic hazard reevaluations. Until that time, the NRC will use the coarse estimate of 25% to conduct SPRA, 50% to conduct lesser analysis, and 25% to perform no additional analyses.

The NRC staff used these assumptions to calculate an average burden per licensee of 3,250 hours per plant, which was rounded up to 3,500 hours to account for uncertainty.

Comment #3. NEI requests that the NRC allow alternative approaches to conducting seismic reevaluations. NEI plans to submit an alternative approach and would like the NRC to provide time for the staff to review and accept the approach.

NRC Staff Response. The allowance for alternatives is inherent to the 50.54(f) information request process. The letters request a licensee to perform an analysis, however the licensee is always able to propose an alternative way of addressing an issue or suggest that an analysis is unnecessary.

Comment #4. NEI believes that the request to identify potential “cliff-edge effects” is misplaced in the flooding walkdowns and should instead be included in the flooding hazards reevaluation.

NRC Staff Response. The NRC staff is continuing to discuss this issue with stakeholders. As mentioned in the response to Comment #3, the nature of the 50.54(f) information request process provides the licensee with some latitude regarding alternative analyses, and licensees are free to propose alternative approaches. From the perspective of estimating licensee burden, the NRC staff believes that evaluating cliff-edge effects during the flooding evaluation would require the same number of hours performing this requirement as part of a flooding reevaluation.

Comment #5: NEI expressed concern that the industry will be unable to comply with requested due dates for submitting information on emergency preparedness due to the requirements in the November 2011 Emergency Preparedness final rule. NEI proposed that these assessments begin in December 2012.

NRC Staff Response. The requested response date for licensees to submit communications analysis is 90 days from issuance of the 50.54(f) letter. The requested response date for draft staffing analysis is due 90 days from issuance and

the final analysis is due 60 days from the issuance of NRC guidance, which will be issued in the fall of 2012. As a result, the final staffing analysis will not be due until the winter of 2012.

The NRC staff previously adjusted the response times for these requirements and believes that a further increase in response time would not be appropriate. The current response times reflect an increase in the number of days to respond since NRC staff made a draft of the 50.54(f) letter publically available to support a January 18, 2012 public meeting with stakeholders, including NEI. The NRC staff believes that the current response times strike a balance between the licensee resources and the need to perform this task in a timely manner. In addition, based on the low burden required for completion of the tasks (50 hours for EP staffing analysis and 50 hours for EP communications analysis), the NRC staff believes that the industry can meet this schedule. We are engaged with NEI on providing generic guidance for this issue that will facilitate timely response. Should licensees be unable to meet this schedule, the requirements of the 50.54(f) letters allow the licensee to notify the NRC within 60 days and describe the alternative course of action it proposes to take.

9. Payment or Gift to Respondents

Not Applicable

10. Confidentiality of Information

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

11. Justification for Sensitive Questions

Not Applicable

12. Estimated Burden and Burden Hour Cost

Respondents

The respondents for this collection will be 104 power reactor licensees, 2 reactors in the process of resuming licensing, and 2 Combined License (COL) applicants (2 units each). The power plant licensees will be asked to perform all information collections (seismic and flooding reevaluations and walkdowns and emergency preparedness evaluations). Reactors resuming licensing will be asked to perform seismic and flooding reevaluations and emergency preparedness evaluations, but not walkdowns, as they have not yet completed construction. COL applicants will be asked to submit emergency preparedness evaluations only.

Estimated Burden and Cost

The NRC staff estimates that the time to respond to all requirements contained in the 50.54(f) information request over the clearance period (the next three years) totals 1,109,881 hours at a cost of \$302,997,513 (1,109,881 hours x \$273/hr). This burden estimate represents the entire industry burden to respond to the 50.54(f) request. If this burden is annualized over a three-year clearance period, the burden is estimated to be 369,960 hours (1,109,881 hours / 3 years = 369,960 hours per year). See Table 1 for a detailed breakdown of licensee burden.

Burden assumptions

Enclosures 1-5

Confirmation of Receipt

- All 110 licensees receiving 50.54(f) letters will be required to confirm receipt of the 50.54(f) letters within 30 days. This is estimated to incur minimal burden, at 2.6 hours per response. The required response is a written statement, signed under oath or affirmation.

Response indicating inability to comply with the information collection request

- Licensees are requested to respond within 90 days of the issuance of the 50.54(f) letters if they are unable to comply with the information collection request. In developing the 50.54(f) letters, the NRC staff has worked closely with industry regarding all requirements, and will continue to do so following issuance of the letters, including providing guidance to licensees. Due to the continuing interactions with licensees, the NRC staff does not anticipate that any licensees will submit a response indicating an inability to comply with the request. Should a licensee submit a response, it is estimated to take one hour.

Enclosure 1

Estimates for Enclosure 1 include time for licensees to submit their risk assessment approach or confirm their use of a generic approach, submit the seismic hazard reevaluation and submit the seismic risk assessment.

Submit risk assessment approach (seismic)

- The NRC staff estimates that it will take an average of 1,700 hours for the seismic hazard reevaluation and, given that the NRC staff is developing guidance with stakeholders, only 10% of this effort (170 hours) will be required for confirming and submitting their approach. Note that NEI estimates also suggest that 10% of effort will be required for confirming and submitting the approach.

Submit hazard reevaluation (seismic)

104 power reactor licensees plus 2 plants resuming licensing (106 plants total) will conduct hazard reevaluations.

- Central and Eastern US (CEUS): Ninety-six operating reactors plus 2 plants resuming licensing in the CEUS (defined as those east of the Rocky mountains) will be able to utilize a recently released seismic source characterization developed jointly by the Electric Power Research Institute, the Department of Energy, and the NRC. Based on staff experience, including input from NRC seismologists, this effort is estimated to require 1,420 hours.
- Western US (WUS): The NRC staff anticipates that it will require additional effort for eight plants in the Western US to respond, because they will do not have the benefit of a recent source characterization as the CEUS licensees.

The NRC staff estimates that the effort required for WUS licensees will be approximately twice that of those in the CEUS, or 2,850 hours.

Submit seismic risk assessment

For the 106 licensees performing seismic evaluations, the NRC staff made the following assumptions:

- 25% of licensees (or 27 licensees) would perform an SPRA (Seismic Probabilistic Risk Assessment) estimated to take 8,000 hours. The actual amount of effort is expected to be variable depending upon existing risk models that a licensee may be able to draw upon in performing the SPRA.
- 50% of licensees (43 licensees) would perform a Seismic Margin Analysis (SMA), which is a less resource intensive analysis requiring approximately 2,500 hours.
- The remaining 25% (26 licensees) would not perform any additional analyses. The average time to perform a seismic risk assessment was therefore estimated to be 3,250, which the NRC staff rounded up to approximately 3,500 hours to account for uncertainty. (This rounding is equivalent of increasing the burden for an SPRA to 8,450 hours and the SMA to 2,700 hours).

Burden estimates are presented on Table 1 according to the number of plants that will be identified as high priority or not. High priority plants will be required to submit their risk assessments a year earlier than other plants.

- Higher priority plants: The NRC staff anticipates that one-third of the plants conducting hazard evaluations (37 reactors) will be determined to be higher priority plants for the purpose of seismic risk assessments, based on factors currently being determined such as magnitude of the difference design basis and reevaluated hazards and existing margin. Approximately 25% of power reactors in the US are anticipated to require an SPRA, meaning that most but not all, of the high priority plants will perform an SPRA. Twenty-seven plants were estimated to conduct an SPRA (8,450 hours) and 10 were estimated to conduct an SMA (2,700 hours).

In addition, the time period when the burden will be accrued was taken into account. The risk assessments will be submitted in years 4 through 6 for higher priority plants; however, some of the work to perform the risk assessments will be conducted in years 1 through 3 (the current clearance period). NRC staff assumes that 50% of the effort will be incurred in the current clearance period, or 4,225 hours (8,450 hours x 50%) annually for licensees conducting an SPRA and 1,350 hours (2,700 hours x 50%) annually for higher priority licensees conducting an SMA.

- The NRC staff estimates that 53 plants (50% of all plants conducting hazard evaluations) will perform an SMA, a less time intensive analysis requiring 2,500 hours to complete. Ten of these plants are assumed to fall into the high priority category and are accounted for as described in the previous bullet. The 43 remaining plants are assumed to fall into the lower priority category.

The time period when the burden will be accrued was taken into account. The risk assessments will be submitted in years 5 through 7 for lower priority plants; however, some of the work to perform the risk assessments will be conducted in years 1 through 3 (the current clearance period). NRC staff assumes that 40% of the effort will be incurred in the current clearance period, or 1,080 hours (2,700 hours x 40%) annually for lower priority licensees conducting an SMA.

- The NRC staff estimates that 26 plants (25% of all plants conducting hazard reevaluations) will not be required to conduct any additional analyses. These plants are not shown on the table in the totals for risk assessments.

Enclosure 2

Estimates for Enclosure 2 include time for licensees to submit their integrated assessment approach or confirm use of generic approach, submit flooding hazard reevaluation and submit an integrated assessment for flooding hazards. One hundred and four power reactor licensees plus two plants resuming licensing (106 plants total) will conduct integrated assessments.

Submit integrated assessment approach or confirm use of generic approach

- The NRC staff estimates that it will take 1,300 hours for the flooding hazard reevaluation and, given that the NRC staff is developing guidance with stakeholders, only 10% will be required for confirming and submitting their approach.

Submit hazard reevaluation (flooding)

- In determining the estimated burden for reevaluating the flooding hazard, the NRC staff estimated the burden for various types of sites and then scaled the individual burden by the number of sites in each category. Sites that had not recently performed a flooding evaluation or because of location may be exposed to additional flooding hazards were assumed to take a larger effort than those that had recently performed a flooding evaluation (e.g., a recent evaluation in support of a new unit on the same site) or by location could justify elimination of certain hazards (e.g., sites that are sufficiently inland to preclude a tsunami occurring). Approximately one-fifth of sites were estimated to have a recent flooding study in support of a new unit on the site, with a burden of 400 hours for these sites. One-fifth of sites were estimated to have a surge or tsunami hazard, requiring 2,900 for the flooding hazard reevaluation. All other sites were estimated to require 800 hours to perform the reevaluation. The average time to perform the flooding reevaluation was therefore estimated to be 1,143 hours, which was rounded up to 1,300 hours to account for uncertainty. (Of these 1,300 hours, 10% is allocated to submitting the assessment approach and 1,170 is allocated toward performance of the reevaluation).

Submit integrated assessment for flooding hazards

- The estimate for integrated assessment assumed that one quarter of sites would incur significant review effort (5,000 hours), one half would be required to perform a lesser analysis (2,500 hours), and the remaining one quarter of plants would have a reevaluated hazard below their current design basis and

not need to perform any additional evaluation. The average burden was estimated to be 2,500 hours and rounded up to 2,700 hours to account for uncertainty.

The time period when the burden will be accrued was taken into account. The integrated assessments will be submitted in years 3 through 5; however, some of the work to perform the integrated assessments will be conducted in years 1 through 3 (the current clearance period). NRC staff assumes that two-thirds of the effort will be incurred in the current clearance period, or 1,800 hours (2,700 hours x 67%) annually all responding licensees.

Enclosure 3

Estimates for Enclosure 3 include time for licensees to submit seismic walkdown procedures or confirm use of NRC-endorsed procedures and submit a final seismic walkdown report. One hundred and four power reactor licensees will be asked to conduct walkdowns. (Plants resuming licensing and COL applicants will not be asked to conduct walkdowns).

Submit seismic walkdown procedures

- The NRC staff estimates that it will take 2,000 hours for the seismic walkdowns and, given that the NRC staff is working with stakeholders to develop generically applicable guidance, only 10% (200 hours) will be required for confirming and submitting their approach.

Submit final seismic walkdown report

- The NRC staff assumed that all licensees would incur similar burden in performing the walkdowns and accounted for site preparation, training, actual performance of the walkdown, and review of the results. The estimate of 1,800 hours is based on staff experience. The NRC staff believes the estimates are particularly conservative, as we did not account for efficiencies at multi-unit sites.

Enclosure 4

Estimates for Enclosure 4 include time for licensees to submit flooding walkdown procedures or confirm use of NRC-endorsed procedures and submit a final flooding walkdown final report. One hundred and four power reactor licensees will be asked to conduct walkdowns. (Plants resuming licensing and COL applicants will not be asked to conduct walkdowns).

Submit flooding walkdown procedures

The NRC staff estimates that it will take 2,000 hours for the seismic walkdowns and, given that the NRC staff is working with stakeholders to develop generically applicable guidance, only 10% will be required for confirming and submitting their approach.

Submit final flooding walkdown report

- The NRC staff assumed that all licensees would incur similar burden in performing the walkdowns and accounted for site preparation, training, actual performance of the walkdown, and review of the results. The estimate of 1,800 hours is based on staff experience. The NRC staff believes the

estimates are particularly conservative, as we did not account for efficiencies at multi-unit sites.

Enclosure 5

Estimates for Enclosure 5 include time for licensees to submit communications analysis and submit initial and final staffing analysis related to emergency preparedness. All 110 licensees receiving 50.54(f) letters will be required to submit the information on emergency preparedness.

Submit communications analysis

- The NRC staff estimates that the communications analysis will require 50 hours, based on experience of NRC staff in the Office of Nuclear Security and Incident Response.

Submit staffing analysis

- The NRC staff estimates that the draft and final staffing analysis will require 25 hours each, based on experience of NRC staff in the Office of Nuclear Security and Incident Response.

13. Estimate of Other Additional Costs

There are no additional costs.

14. Estimated Annualized Cost to the Federal Government

The NRC staff estimates that the hours required to review hazard reassessment reports and risk and integrated assessments, review and endorse seismic and flooding walkdown procedures, and review emergency preparedness analyses will require 92 full-time equivalent (FTE) employees over the course of the next seven years. This averages to 13 FTE annually. At an estimated 1,400 hours per FTE, NRC effort is estimated at 18,200 hours or \$4,968,600 (18,200 x \$273/hr).

15. Reasons for Change in Burden or Cost

The emergency clearance request was approved on March 6, 2012, as a new collection with a total burden of 1,383,200 hours and 1,456 responses (annualized to 461,067 hours and 485.3 responses).

The current request is for 1,109,881 hours and 1,466 responses (annualized to 369,960 hours and 489 responses), a decrease of 91,107 annualized hours and an increase of 3 responses.

The decrease in burden from the original request is due to the fact that the current request takes into account the accrual of burden over time. Some of the activities in the 50.54(f) letters require licensees to perform analyses and submit reports up to seven years after receiving the 50.54(f) letters from the NRC. The original request included burden that would be incurred outside of the three year clearance period, whereas the current request includes burden for only those information collection activities that are estimated to be conducted during the next three years.

The increase in responses from the original request is due to the addition of 6 respondents: 2 reactors in the process of resuming licensing, and 2 Combined License (COL) applicants (2 units each). The power plant licensees will be asked to perform all information collections (seismic and flooding reevaluations and walkdowns and emergency preparedness evaluations). Reactors resuming licensing will be asked to perform seismic and flooding reevaluations and emergency preparedness evaluations, but not walkdowns, as they have not yet completed construction. COL applicants will be asked to submit emergency preparedness evaluations only. The addition of these respondents was determined to be necessary after submission of the original request, and will provide information from these licensees that is not available from any other source.

16. Publication for Statistical Use

Not Applicable

17. Reason for Not Displaying the Expiration Date

Not Applicable

18. Exceptions to the Certification Statement

None

B. COLLECTIONS OF INFORMATION EMPLOYING STATISTICAL METHODS

Not Applicable

Table 1
Licensee Reporting Burden to Respond to the 50.54(f) Request during the Clearance Period

Enclosure	Requirement	Time to Respond	Respondents	Responses per Respondent	Total Responses	Burden Per Response	Burden	Cost at \$273/hr
Enclosures 1 – 5	Confirmation of Receipt	30 days	110	1	110	2.6	286	\$78,078
Enclosures 1 – 5	Response indicating inability to comply with information request	90 days for enclosures 1-4, 60 days for enclosure 5	0	0	0	0	0	\$0
Enclosure 1: Recommendation 2.1: Seismic Reevaluation	Submit risk assessment approach or confirm use of generic approach	60 days after issuance of NRC guidance ¹	106	1	106	170	18,020	\$4,919,460
Enclosure 1: Recommendation 2.1: Seismic Reevaluation	Submit hazard reevaluation (seismic), Central and Eastern US (CSUS)	1.5 years	98	1	98	1,420	139,160	\$37,990,680
Enclosure 1: Recommendation 2.1: Seismic Reevaluation	Submit hazard reevaluation (seismic), Western US (WUS)	3 years	8	1	8	2,850	22,800	\$6,224,400

¹ NRC estimates that guidance will be issued in November 2012. The response would be due 60 days after the issuance of NRC guidance.

Enclosure	Requirement	Time to Respond	Respondents	Responses per Respondent	Total Responses	Burden Per Response	Burden	Cost at \$273/hr
Enclosure 1: Recommendation 2.1: Seismic Reevaluation	Submit seismic risk assessment, high priority plants conducting SPRA ²	3 years after submission of seismic hazard reevaluation	27	1	27	4,225	114,075	\$31,142,475
Enclosure 1: Recommendation 2.1: Seismic Reevaluation	Submit seismic risk assessment, high priority plants conducting SMA	3 years after submission of seismic hazard reevaluation	10	1	10	1,350	13,500	\$3,685,500
Enclosure 1: Recommendation 2.1: Seismic Reevaluation	Submit seismic risk assessment conducting SMA	4 years after submission of seismic hazard evaluation	43	1	43	1,080	46,440	\$12,678,120
Enclosure 2: Recommendation 2.1 Flooding Reevaluation	Submit integrated assessment approach or confirm use of generic approach	60 days after issuance of NRC guidance ³	106	1	106	130	13,780	\$3,761,940
Enclosure 2: Recommendation 2.1 Flooding Reevaluation	Submit hazard reevaluation (flooding)	1-3 years, based on NRC prioritization	106	1	106	1,170	124,020	\$33,857,460

² The NRC staff anticipates that one-third of the plants conducting hazard evaluations (37 reactors) will be determined to be higher priority plants for the purpose of seismic risk assessments. Of these 37 plants, 27 plants are estimated to be conducting an SPRA, while 10 are estimated to be conducting an SMA.

³The NRC estimates that guidance will be issued in November 2012. The response would be due 60 days after the issuance of NRC guidance.

Enclosure	Requirement	Time to Respond	Respondents	Responses per Respondent	Total Responses	Burden Per Response	Burden	Cost at \$273/hr
Enclosure 2: Recommendation 2.1 Flooding Reevaluation	Submit integrated assessment for flooding hazards	2 years after submission of flooding hazard reevaluation	106	1	106	1,800	190,800	\$52,088,400
Enclosure 3: Recommendation 2.3: Seismic Walkdowns	Submit seismic walkdown procedures or confirm use of NRC-endorsed procedures	120 days	104	1	104	200	20,800	\$5,678,400
Enclosure 3: Recommendation 2.3: Seismic Walkdowns	Submit seismic walkdown final report	180 days after NRC endorsement of walkdown procedures ⁴	104	1	104	1,800	187,200	\$51,105,600
Enclosure 4: Recommendation 2.3: Flooding Walkdowns	Submit flooding walkdown procedures or confirm use of NRC-endorsed procedures	90 days	104	1	104	200	20,800	\$5,678,400
Enclosure 4: Recommendation 2.3: Flooding Walkdowns	Submit flooding walkdown final report	180 days after NRC endorsement of walkdown procedures ⁵	104	1	104	1,800	187,200	\$51,105,600

⁴The NRC estimates that it will endorse seismic walkdown procedures in May 2012. The final seismic walkdown report would be due 180 days after NRC endorsement of walkdown procedures.

⁵The NRC estimates that it will endorse flooding walkdown procedures in May 2012. The final flooding walkdown report would be due 180 days after NRC endorsement of walkdown procedures.

Enclosure	Requirement	Time to Respond	Respondents	Responses per Respondent	Total Responses	Burden Per Response	Burden	Cost at \$273/hr
Enclosure 5: Recommendation 9.3: Emergency Preparedness	Submit communications analysis	90 days	110	1	110	50	5,500	\$1,501,500
Enclosure 5: Recommendation 9.3: Emergency Preparedness	Submit initial staffing analysis	60 days	110	1	110	25	2,750	\$750,750
Enclosure 5: Recommendation 9.3: Emergency Preparedness	Submit final staffing analysis	90 days ⁶	110	1	110	25	2,750	\$750,750
TOTAL			110		1,466		1,109,881	\$302,997,513
ANNUALIZED TOTAL			110		489		369,960	\$100,999,171

TOTAL Reporting Burden: 1,109,881 hours
TOTAL Responses: 1,466 responses

ANNUALIZED Reporting Burden: 369,960 hours
ANNUALIZED Responses: 489 responses

Respondents: 110

⁶ The NRC estimates that it will issue guidance on EP staffing analysis in fall 2012.