

FINAL SUPPORTING STATEMENT
FOR
NRC SURVEY OF PUBLIC RESPONSE TO EMERGENCIES

(3150-XXXX)

NEW COLLECTION

Description of the Information Collection

The U.S. Nuclear Regulatory Commission (NRC) is empowered by the Atomic Energy Act of 1954, as amended (the Act), to provide for the licensing and regulation of utilization facilities, i.e., nuclear power plants as used in this application. The regulations in 10 CFR Part 50, "Domestic Licensing of Production and Utilization Facilities," are promulgated by the NRC to provide for the licensing and regulation of production facilities. 10 CFR 50.47 contains 16 emergency planning standards that must be met in the onsite and offsite emergency plans for a nuclear power reactor. These standards include the establishment of notification procedures, and periodic information for the public on how they will be notified and what their initial actions should be in an accident. NRC regulations for nuclear power plants are designed to ensure protection of public health and safety through conservative design, construction and operation. Nuclear power plants are required to implement extensive emergency plans to ameliorate consequences to public health and safety in the unlikely event of an accident. NRC regulations require that nuclear plant operators immediately recommend public protective actions to State/local officials in the event of a serious accident. These protective actions are required to be in accordance with NRC guidance. NRC has conducted a study of its protective action recommendation guidance (the PAR Study NUREG/CR-6953 Vol. 1) that has identified enhancements that could increase the level of public protection during accidents. However, there is no current data available regarding likely public reaction to such protective action direction ordered by State/local officials within nuclear power plant Emergency Planning Zones (EPZs).

In an effort to improve understanding of likely public reaction to protective action direction, the NRC intends to conduct a telephone survey to assess public reaction to existing protective action strategies, new protective action strategies and the effectiveness in which these strategies are conveyed to the public. The survey will be conducted by a telephone survey contractor under contract to Sandia National Laboratories and will produce statistical descriptions of likely public reaction to and acceptance of various protective action strategies. The targets for the telephone survey are randomly selected members of the public that reside within the 10 mile EPZs around nuclear power plants. This is a nationwide survey of the public residing within EPZs. The response to the surveys will be used by the NRC in the development of enhancements to its guidance for nuclear power plant protective action recommendations and the means by which this information is disseminated. The survey will also improve the understanding of other areas related to protective action implementation, such as the extent of shadow evacuations and the expected usage of congregate care facilities.

Sandia is a government-owned/contractor operated facility. Sandia Corporation, a Lockheed Martin company, manages Sandia for the U.S. Department of Energy's National Nuclear Security Administration. The telephone survey contractor regularly conducts telephone interviews with residents from randomly selected households for research purposes. When conducting a survey of residents, the approach is designed to provide samples that are representative of households in the study area to permit reliable statistical inference from the

sample to the population. To assure the quality of these samples and the ability to make reliable statistical inference to the population, the contractor implements extensive quality control procedures that begin prior to studies going into the field and continue until the completion of the data collection process. The confidentiality and anonymity of individuals are strictly observed. Although respondents' first names and telephone numbers are recorded, they are erased once all of the data are collected for a particular survey and the data are checked for inconsistencies. Since both the first name and telephone number are erased there is no way of linking a set of answers with an individual.

Because existing information on this topic is not available, NRC is requesting Office of Management and Budget (OMB) approval to conduct the survey to obtain this information. The survey will sample residents who live within the 10 mile EPZ of nuclear power plants. The results of the full survey are expected to be published as an NRC NUREG/CR for use by Federal agencies, States, and other interested parties.

A. JUSTIFICATION

1.

Need for and Practical Utility of the Collection of Information

The NRC is considering enhancements to its guidance on public protective action recommendations for nuclear power plant operators for use in an unlikely event of a serious accident. The benefit of such alternative protective actions is directly related to the level of compliance of the public to such actions. In conducting the research on these alternative protective actions, the NRC involved stakeholders and emergency response agencies to assure that the protective actions are practical to implement. An understanding of likely public response is also necessary to determine the practical merits of these enhanced protective actions. The objectives of this NRC survey are to (1) obtain quantitative results of the public's likely reaction to enhanced protective action direction, (2) establish measures of central tendency of the public's potential response to various protective action strategies and, (3) support updating of existing assumptions used in the development of nuclear power plant emergency response requirements.

The information received will be used to support a decision on enhancements of protective actions. Although the primary focus of this survey is the determination of whether enhancements in protective actions would be practical, the questions used to support this decision have additional utility. The NRC will maximize the use of this data to develop an understanding of the public perception of the emergency planning items addressed in the survey. The data received may be useful in determining whether improvements would be beneficial in the education of the public on nuclear power plant emergency response and preparedness. Results of the survey should provide an indication of whether residents within EPZs are satisfied with the level of information that they receive on emergency response planning and whether they understand the terminology that would be used during an emergency.

2.

Agency Use of Information

This is a new collection of information.

The information gained from the telephone survey will inform the decision process on whether to enhance NRC guidance for nuclear power plant operators for protective action recommendations during accidents. The information will be evaluated along with research information compiled through the PAR study (NUREG/CR-6953 Vol. 1). A final report is expected to be published as NUREG/CR-6953 Vol. II which will integrate the telephone survey information with the existing research and establish a basis for a decision on whether to pursue protective action enhancements. The basis for such a decision would be incomplete without input from a representative group of public stakeholders.

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 100% of the potential responses are filed electronically.

The survey will be conducted via a computerized template that is coded to minimize the burden. This system facilitates skipping questions that are not relevant to the individual interview based on answers to earlier questions in the survey. The questionnaire is attached.

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 unnecessary information collections.

There is no similar information available from residents of nuclear power plant EPZs.

5.

Effort to Reduce Small Business Burden

This survey does not directly involve small entities.

6.

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

If the collection is not conducted, NRC cannot fully assess the potential benefits of enhanced protective actions. This is a one-time collection.

There are no technical or legal obstacles to conducting this data collection.

7.

Circumstances Which Justify Variation from OMB Guidelines

There is no variation from OMB guidelines.

8.

Consultations Outside the NRC

An opportunity for public comment on the Information Collection Requirements for this clearance package was published in the Federal Register on May 3, 2007, (72 FR 24625). Comments were received from eight stakeholders and have been addressed in the table below.

The draft survey was revised by incorporating stakeholder comments and shortening the survey from 118 to 54 questions.

Pre-testing of the survey among respondents of the same population set will be conducted and will include no more than 10 pre-testing surveys. Therefore the total number of completed telephone surveys will be 810. The survey data from the pre-testing will not be included in the overall statistical analysis. In developing the survey instrument, the introduction has been structured in a concise and informative manner to minimize hang ups. Use of such an introduction has been demonstrated to minimize hang ups. Using the telephone instrument that has been developed, it is estimated that of the 2,500 numbers called, approximately 37%, or 920, will begin to answer the survey. It is then estimated that of the 920 members numbers called, approximately 15% of respondents will not complete the full survey. This rate is based on commercial experience with surveys of similar length. The estimated time to complete the telephone survey is 15 minutes which is based on pre-testing of the survey in a closed setting with the contractor. The 800 completed surveys will take approximately 200 hours. The remaining 120 uncompleted surveys, resulting from the hang-ups or drop outs are estimated to average 5 minutes for a subtotal of 10 hours. Pre-testing activities are expected to take more time than the final survey. During pre-testing, the interviewer may clarify questions and ask the respondent to elaborate on items that may not be well understood. This interaction will cause the length of pre-tested surveys to be approximately 30 minutes. These additional 10 surveys at 30 minutes each increases the burden by 5 hours. Therefore, the total estimated burden is 215 hours.

NRC has contracted the U.S. Department of Energy's Sandia National Laboratories, in Albuquerque, New Mexico, to analyze the results of the survey which will be conducted by a telephone survey contractor under contract to Sandia National Laboratories. Sandia has also provided input on the survey design.

Table of Comments

Comment	Response
If done correctly, a survey of this nature could provide useful insights for making protective action decisions. In its present form we have considerable concerns regarding the design of	Agreed, the results of the survey must be used appropriately to provide any meaningful conclusions. It is understood that public perceptions provided in a survey may not

the survey and believe that it has inherent flaws that will limit its value. The survey may, in fact, produce results that would be contrary to responses of the public in an actual radiological emergency.

Self reporting of behavioral intentions is fraught with sources of error. The survey methodology described in the NRC filings has many questions that involve self reporting. Several questions provide little basis for a responder to provide the quantitative response that is sought. For example, one question asks responders to determine to what extent they are knowledgeable about radiological emergency planning in their community. This type of question, without any basis, allows an individual to judge for himself the extent of his knowledge. Yet, there is no way to independently evaluate the accuracy of the response. As such, the question has little value.

The 118-question survey is extraordinarily long, with an undefined sample. The sample is not sufficiently defined so that only full-time residents of communities are interviewed, yet employees of electric companies that own and operate nuclear power plants in each locale are excluded from the sample. Finally, the cost of the survey is about four times that of comparable surveys conducted by the industry.

The sample is undefined. We recommend interviewing an equal number of persons from each plant site. Otherwise, the findings will skew to the most populous plant sites. Screening on other considerations is not evident from the questionnaire.

Will households with electric company employees be included or excluded?

Q. 6. Instead of asking how knowledgeable they feel, ask how well informed they feel. People may not want to admit to not being knowledgeable (makes them look bad). They have no problem admitting to not being well informed (not their fault).

Q10 and 11: These open-ended questions ask for recall about when and how often information was received. It is unlikely that people will recall

actually reflect actions taken by individuals in an emergency that they have not experienced. However, it is expected the data can provide insights into how to improve protective actions and convey necessary information to the public.

Questions have been rephrased to limit the amount of self reporting in the survey. It is understood that self reporting responses provided in a survey may not actually reflect actions taken by individuals in an emergency that they have not experienced. However, it is expected the data can provide insights into how to improve protective actions and convey necessary information to the public. It is not the intention of this study to use the results of the survey to statistically quantify individual answers to predict response.

The coded survey was provided in the original submittal and included randomized sections. The survey has been revised and is presented in numerical order. The survey has been shortened and reworded significantly. Employees of electric companies are excluded since their answers would be biased. The cost of the survey was reduced by having it re-bid and awarded at a lesser amount.

The sample is defined as the population residing within the emergency planning zones around the 62 nuclear power plant sites. The intent of the survey is to identify national level insights as opposed to statistical site specific information.

Households with electric company employees will be excluded.

Question has been changed as recommended.

Question has been changed as recommended.

correctly or that responses will be classifiable in a meaningful way. A better question would ask if they recall receiving any information on this topic during the past year.

Q12 and 13: The survey should ask more direct questions to find out if people have read the information and if they keep it in a place where they can find it easily.

Q18: Isn't the nationally accepted term "shelter-in-place"?

Q40: It is not accurate to say: "you might be instructed to do one of two things in the event of an incident at a nuclear power plant in your area: either evacuate or shelter." There are other possibilities. Many incidents will require no action.

Q46 is too loose. If the respondent's child has been taken to the reception center, then you can be sure that the respondent will go to that reception center to pick up the child. If the entire family is intact at the time of the evacuation, then their response may be quite different. This line of inquiry has to be broadened and made more specific in order to get worthwhile responses. Additionally, the definition and function of a reception center varies from one site to another throughout the US. If this question is to be asked, the caller should have a definition of reception center ready to explain to respondents.

Q93 and Q94: These questions attempt to learn whether the public would prefer to have the Federal, State, or local governments make decisions about their safety in the event of an incident at the nuclear power plant. The premise for these questions is faulty.

It is highly questionable that the compliance rate to protective action direction can be inferred accurately from this type of survey.

While I believe that the information is not NECESSARY for the NRC to properly perform its

Question has been changed as recommended.

Shelter-in-place has been made consistent throughout. Although many nuclear power plant emergency response brochures use the term "shelter".

Question has been changed.

Schools are not necessarily located in the emergency response planning area where the child lives and the parent and child could very well be directed to a different reception center. This is of interest to the survey. Terminology has been changed.

Understand, but some previous studies conclude that the public may not respond as directed if direction is provided by a figure they do not trust and respect. Information on this topic regarding preference of public officials will be beneficial.

Agreed. That is not the intent of the survey. It is understood that public perceptions provided in a survey may not actually reflect actions taken by individuals in an emergency that they have not experienced. However, it is expected the data can provide insights into how to improve protective actions and convey necessary information to the public.

Agreed.

functions, the results of the survey may be useful when decisions are made regarding changing current (or implementing new) protective action methods for members of the public.

9.

Payment or Gift to Respondents

The members of the public responding to the telephone survey will not receive payments or gifts.

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).

Each telephone survey instrument will be assigned a code number to ensure confidentiality. Only the survey contractor will have access to the identity of the participants. All identifiable information will be destroyed by the survey contractor at the end of the project.

11.

Justification for Sensitive Questions

There will be no survey questions of a sensitive nature.

12.

Estimated of Annualized Burden and Burden Hour Cost

About 800 completed surveys will be acquired, and a commercial market research firm will conduct the survey. We expect to use a geographical location method to identify the population base within the 10 mile EPZ. Using this approach reduces the potential for non-response and optimizes the market research resources. To complete 800 surveys, a sample group of 15:1 is initially planned. Normally this would be a higher value if the population base were selected using a broader boundary definition such as zip codes. The 15:1 ratio yields a telephone sample of 15,000 phone numbers. Some of this set of 15,000 will be non-working numbers and many from this set will screen calls either through caller ID or registration with the Federal 'Do Not Call' program. Through experience with similar size surveys, it is expected that 2500 numbers will be ultimately be dialed. The contract with the market research firm specifies that the completed surveys will be conducted in 2 to 3 weeks.

Pre-testing of the survey among respondents of the same population set will be conducted and will include no more than 10 pre-testing surveys. Therefore the total number of completed telephone surveys will be 820. The survey data from the pre-testing will not be included in the overall statistical analysis. In developing the survey instrument, the introduction has been structured in a concise and informative manner to minimize hang ups. Use of such an introduction has been demonstrated to minimize hang ups. Using the telephone instrument that has been developed, it is

estimated that of the 2,500 numbers called, approximately 37%, or 930, will begin to answer the survey. It is then estimated that of the 930 members numbers called, approximately 15% of respondents will not complete the full survey. This rate is based on commercial experience with surveys of similar length. The estimated time to complete the telephone survey is 15 minutes which is based on pre-testing of the survey in a closed setting with the contractor. The 800 completed surveys will take approximately 200 hours. The remaining 120 uncompleted surveys, resulting from the hang-ups or drop outs are estimated to average 5 minutes for a subtotal of 10 hours. Pre-testing activities are expected to take more time than the final survey. During pre-testing, the interviewer may clarify questions and ask the respondent to elaborate on items that may not be well understood. This interaction will cause the length of pre-tested surveys to be approximately 30 minutes. These additional 10 surveys at 30 minutes each increases the burden by 5 hours. Therefore, the total estimated burden is 215 hours.

The results of the survey will be published in a report by the contractor and potentially in an NRC document such as a NUREG/CR. No record of the survey data other than the data contained in these reports are expected to be kept by the contractors. No record of the survey information is expected to be kept by the members of the public contacted during the survey.

13.

Estimate of Other Additional Costs

There will be no additional cost burdens.

14.

Estimated Annualized Cost to the Federal Government

The cost to the Federal Government for this one-time-only survey includes costs for contractor support and analysis for the survey and analysis and NRC Headquarters staff management and review.

Cost for Survey Support

The survey will be conducted by the NRC contractor, Sandia National Laboratories and a qualified subcontractor with experience in telephone surveys. The subcontractor will conduct the survey and Sandia will analyze the data. No purchase of computers, software, or monitoring or testing equipment is needed. The NRC contract with Sandia includes approximately \$70,000 for these activities. This includes both the conduct of the survey, analysis of data and documentation of the results in a formal report.

Federal Government Cost

NRC Headquarters staff will manage the development of the survey and perform a technical review of the survey results. There will also be costs incurred by NRC for contract management and general oversight of the work scope.

0.05 FTE x 2,080 hours x \$258/hour = \$26,832

Total estimated survey cost for the Federal government

Lab costs/statistical consultant + Federal costs =

\$70,000 + \$26,832 = \$96,832

15.

Reasons for Change in Burden

This is a new collection.

16.

Publication for Statistical Use

NRC plans on publishing a report summarizing the survey results.

The project is to be completed within one year of approval by OMB. The survey will be conducted within three months of OMB approval and will take place over a six week period. The final report is expected to be published within one year after OMB approval.

17.

Reason for Not Displaying the Expiration Date

Not applicable. The expiration date will be displayed.

18.

Exceptions to the Certification Statement

There are no exceptions.