

**Public Comment Analysis
and Adjudication:
Supplement 3 to
NUREG-0654/FEMA-REP-1,
“Guidance for Protective
Action Strategies”**

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Public Comment Analysis and Adjudication: Supplement 3 to NUREG-0654/FEMA-REP-1, “Guidance for Protective Action Strategies”

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ABSTRACT

This study is a thorough analysis and adjudication of official public comment submissions for Supplement 3, Revision 1, “Guidance for Protective Action Strategies”, draft report for comment issued March 2010, to NUREG-0654/FEMA-REP-1, Revision 1, “Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants,” issued November 1980. The staff of the U.S. Nuclear Regulatory Commission (NRC) also developed a comment tracking and analysis process to gain further analytical insights into the nature of stakeholder comments. Comments on the draft version of Supplement 3 were solicited in the *Federal Register* (Volume 75, Number 44) published March 8, 2010. The NRC and the Federal Emergency Management Agency (FEMA), held a series of public meetings during the comment period to facilitate stakeholder understanding of the document.

The comment analysis approach developed in this study was used in analyzing comments on Supplement 3; however, this methodology can be adapted for other comment collections and reflects the NRC’s desire to gain enhanced insights into stakeholder concerns.

EXECUTIVE SUMMARY

This study is the adjudication and analysis of all 353 official comments received from interested stakeholders regarding Supplement 3, Revision 1, “Guidance for Protective Action Strategies”, draft report for comment issued March 2010, to NUREG-0654/FEMA-REP-1, Revision 1, “Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants,” issued November 1980. Each official comment has been individually adjudicated and the total comment collection was analyzed to identify trends and inform the adjudication process. The analysis of this data revealed significant trends in the nature of stakeholder comments. The staff of the U.S. Nuclear Regulatory Commission (NRC) developed a statistical comment analysis and tracking process to gain deeper insight into stakeholder concerns. The comment analysis indicates that the highest percentage of stakeholder comments (34 percent) reflect *implementation* concerns, such as resource burden and enforcement. This finding may reflect the current budgetary constraints on state and local governments. Other significant and overarching concerns identified include *protective action development*, *evacuation issues*, and *documentation or editorial concerns*; stakeholders identified these topics at approximately equal levels (about 25 percent each). The comments also identified *coordination and communication* with State, local, and Federal officials as an area of significant concern but at a lower frequency (11 percent).

An analysis of the adjudication of all the comments revealed that the Nuclear Energy Institute (NEI) is the most endorsed commenter, followed by the State of New York, Department of Health. These endorsements follow geographic, economic, and cultural trends. The comments received have helped the NRC to develop guidance that enhances nuclear plant emergency response.

ACKNOWLEDGEMENTS

NRC technical contributors to the completion of this study include Jessica Kratchman and Randolph Sullivan. The concept and analysis techniques were developed and implemented by Jessica Kratchman. Randolph Sullivan adjudicated the public comments on Supplement 3 and provided technical expertise throughout. Robert Kahler provided the management vision and support that allowed this project to come to fruition. The NRC would like to acknowledge the emergency preparedness professionals who provided comments on Supplement 3 as their insights greatly improved the quality of this guidance.

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1.0 INTRODUCTION

Supplement 3, Revision 1, “Guidance for Protective Action Strategies”, draft report for comment issued March 2010 (hereafter referred to as *Supplement 3*) to NUREG-0654/ FEMA-REP-1, Revision 1, “Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants,” issued November 1980, is a coordinated effort between the staff of the U.S. Nuclear Regulatory Commission (NRC) and Federal Emergency Management Agency (FEMA). The NRC expects to issue the guidance in late 2011 contemporaneously with an emergency preparedness related rulemaking. Guidance for the timing of implementation by nuclear power plant licensees will also be issued at that time. Comments on a draft version of Supplement 3 were solicited in the *Federal Register* (Volume 75, Number 44) published March 8, 2010. The original comment period was between March 8, 2010, and May 10, 2010; however, at the request of stakeholders, the comment period was extended until August 8, 2010. The NRC and FEMA jointly held a series of public meetings during the comment period to facilitate stakeholder understanding of the document. Meetings were held March 13 in Bethesda, MD; June 9 in La Crosse, WI; July 19 in Wilmington, DE; and July 21 in Tampa, FL.

The NRC has developed a comment tracking process to gain analytical insights into the nature of stakeholder comments. The staff developed this approach for use in analyzing Supplement 3 comments, but it can be easily adapted for use with other comment collections.

1.1 Background

Revision 1 of Supplement 3, which updates the previous version published in 1996, provides a tool for developing protective action strategies for use by nuclear power reactor licensees in developing site-specific protective action recommendation (PAR) procedures. It is recommended for use by offsite response organizations (OROs) to develop protective action strategy guidance for decisionmakers. Supplement 3 provides an acceptable method for licensees to comply with Title 10 of the *Code of Federal Regulations* 50.47(b)(10) by developing a range of protective actions for the plume exposure emergency planning zone (EPZ). A draft version of Supplement 3 was provided for public comment in March 2010. This report provides a detailed analysis and adjudication of comments submitted to the NRC and FEMA regarding Draft Supplement 3.

1.2 Objectives

The objective of this study is to document the adjudication of comments submitted to NRC and FEMA on draft Supplement 3 and provide an analysis of those comments.

1.3 Scope

Stakeholder comments on Supplement 3 were collected through www.regulations.gov. Only official comments submitted through www.regulations.gov have been tracked, analyzed, and answered, and stakeholders were made aware of this process before and during the comment period. Questions or comments that were verbally communicated are not considered official

comments and therefore are not included in this report. This process identified 353 individual comments. The Results section of this report provides responses to each individual comment and the Analysis section of this report provides insight into the nature and composition of the total comment collection. Insight gained in the Analysis section was used to inform the adjudication of comments. The analysis technique implemented is an innovative process developed specifically for this study; a description of the process and the results of this analysis are provided in the Analysis section. By analyzing the makeup of comments, NRC staff gained valuable insight into the nature of stakeholder concerns.

2.0 Results

This section contains a detailed matrix of all official Supplement 3 public comments and the associated adjudication developed by the NRC. The development of this matrix is discussed in detail in the Analysis section of this report. The adjudication of all comments was based completely upon the technical merit of each individual comment. The “keyword” columns in the matrix identify overarching issues and were used for analysis purposes only (see Analysis section). Comment IDs and comment numbers are parameters used for identification purposes only. A detailed description of parameter development is provided in the Analysis section.

Comment #	ID	Comment	Keyword	Section/ Page	Adjudication
3	43	Initial Alert and Notification- last sentence is not factual. Incident experience dictates that when the public instantaneously utilize their phones, the phone networks (hard wire & cell) in the areas impacted are unusable due to over use. Several examples can be provided. Consistent with the NEI comment, STARS recommends that the material contained in this appendix be relocated to a separate stand-alone document. STARS requests that the document in which this material is placed be released for public comment. STARS does feel that the content is very valuable but would be best located in a stand-alone document. This position is predicated on the belief that the topic of communications extends far beyond the development of PARS.	Appendix Public messaging	Appendix, page A-12	Agree. That is why guidance suggests removing use of phones from the PI brochure. No change.
2	53	Our sixth comment has to do with Appendix A to Supplement 3. We feel that this Appendix dealing with emergency messaging does not belong in this supplement but rather should be included with the project to revise the entire NUREG-0654. It is also our understanding that the NRC is currently in the process of issuing a NUREG on Emergency communications sometime later this year. Appendix A to Supplement 3 of NUREG-0654 should be withdrawn as it is beyond the scope of this document and would only be confused with existing guidance and future efforts to clarify this topic.	Appendix	Appendix	Agree in part. Some of the information will be deleted or placed in a separate document. Change in wording.
4	55		Appendix	Appendix	Disagree in part. Although the appendix has been revised and detail removed, improvements to emergency messaging are critical to effective protective actions. Change in wording.

Comment #	ID	Comment	Keyword	Section/ Page	Adjudication
9	56	<p>Progress Energy concurs with NEI that the Appendix is not appropriate for Supplement 3 for several reasons. * The information in the Appendix differs from the Federal Emergency Management Agency (FEMA) draft Radiological Emergency Preparedness Program Manual (draft) dated May 18, 2009. * The Appendix recommends significant additional information for the Public Information Brochures. Describing concepts such as "Staged Evacuation," "Shadow Evacuation," etc. and adding paragraphs of additional information would likely result in additional confusion for brochure recipients. "This information has not received input from offsite stakeholders (i.e., state and local agencies) and FEMA. The Appendix however, does provide good guidance for emergency messaging and public information that should not be lost. Progress Energy recommends that the Appendix be removed from Supplement 3, receive FEMA review and input, and be placed in another source document.</p>	Appendix	Appendix	Disagree. Enhancements to emergency messaging should be implemented to increase the efficacy of protective action decisions (PADs). No change.
10	56	<p>If the NRC staff chooses to keep the Appendix in Supplement 3, Progress Energy offers the following two comments: Appendix, Section 3.7, Paragraph 2 This paragraph states, "Although most EPZ residents have reviewed the public information brochures (NRC, 2008B), of those who stated they may need evacuation assistance, 42 percent indicated they did not know they could register." This is further evidence that there is a challenge for the brochure recipient to read and comprehend the information that is currently in the brochures. Progress Energy believes that adding more complex information to a document that is not fully read or understood by the reader now would not be effective and would lessen the likelihood of reader comprehension. Progress Energy recommends that the level of detail, required by the Appendix to be included in the Public Information Brochures, be reduced dramatically.</p>	Appendix	Appendix, Section 4.2	Disagree. Apparently, current PI brochures are not as effective as they should be. Hence, it is suggested that other methods be used, as opposed to blaming the public for not reading the brochure. The public survey informed the NRC staff regarding public tendencies. The staff understands that actual response may differ. Interestingly, many survey participants had evacuated, sheltered, or participated in a shadow evacuation. This information was unique and informative, but the NRC considers a broad range of information in making policy decisions. No change.
7	48 57E48	<p>Most of the information contained in the Appendix is standard public information guidance. While useful, it does not belong in this document. It should be published either as a separate document or incorporated in to the public information NUREG currently in progress.</p>	Appendix	Appendix	Agree in part. The appendix will be revised to eliminate information that may be placed in another guidance document. Change in wording.

Comment #	ID	Comment	Keyword	Section/ Page	Adjudication
8	48 57E48	The title of the document is "Criteria for the Preparation and Evaluation..." Does this mean that this Appendix is meant to be used as a checklist for evaluating the licensee's communications? Please clarify. It seemed that this document is very repetitious in that some of what you read in body of the document or it's appendix you see repeated again. What you read in the Appendix, Paragraph 2, you can basically read again in the Appendix, Paragraph 3 and what you read in the Appendix, Paragraph 3 you can read in Paragraph 4 and what you in Paragraph 5 is what you read in Paragraph 4 prior (now you an idea of what it was like reading this!).	Appendix	Appendix	Disagree. The document is not intended to be a checklist. No change.
6	8 38E8	Potential Impact: Rambles... Makes it difficult to concentrate on what may be important. Page A-13, Paragraph 4.2.2 "Evacuation Message"; Page A-3, Paragraph "2.1 Public Response, last sub-paragraph; Page A-12, Paragraph "4. Emergency Alerting and Instructions"; Page A-12, Paragraph "4.2 Ongoing Communications during an Emergency"	Appendix Not constructive		Agree. The first area was for public education, while the second concerned emergency messaging. However, the appendix will be revised. Change wording.
1	8 38E8	This paragraph states, "It should be recognized that, even if an evacuation is ordered immediately, the mobilization of residents and their travel to exit the EPZ takes time. During this period, instructions and communication to the public should be continuous and informative regarding the status of the incident." While the frequency of messaging is important, the statement is misleading, in that one must be careful not to rebroadcast the message too often or lose the attention of the audience one is trying to protect. Again, it seems pretty obvious that the study failed to talk with radio broadcasters or National Weather Service personnel who put out watches and warning all the time for HazMat and Severe Weather. According to radio personalities and NWS personnel who have dealt with other emergency broadcasts on a regular basis, one should broadcast the special news broadcast message 3 or 4 time over 30 to 60 minutes and allow the radio and TV personalities fill in the gaps with discuss of what is happening, instead of just repeatedly reading it. If you continuously repeat the message, people have more of a tendency to turn off the radio/TV or switch to a different station. It has nothing to do with "Trust". What NRC is seeming to forget and what FEMA has already forgotten, is that should there ever be a serious event at a nuclear power station again, almost all news and radio will be covering the event 24/7 initially and then continuing on 24/7 cable radio and TV news stations if it's a slow event. Potential Impact: NRC and FEMA can dictate all they want for plans and make exercises hard, but when it comes to an actual event, State and local political leaders will decide when, what, where, and how much information is to be broadcast and not necessarily follow "The Plans" which have been created to address unrealistic expectations	Appendix Not constructive	Appendix, page A-13	Agree. Change wording: should be "often" not "continuous."

Comment #	ID	Comment	Keyword	Section/ Page	Adjudication
		of NRC and FEMA guidance.			
5	8 38E8	The information provided in the appendix applies to the ORO's and is not applicable to the utilities. The information pertains to everything that is an ORO's responsibility, not the Utility's. The information pertained in the appendix has always been under the oversight of FEMA and it now appears that the NRC is creeping into FEMA's area of responsibility. It also appears that the NRC is in the initial process of trying to "back-door" their regulatory oversight authority on off-site agencies by applying pressure to the utilities to make the utilities responsible for what are actually ORO responsibilities. Potential Impact: Loss of nuclear power stations as ORO's may not go along with the NRC. Loss of emergency first responder agencies who are tired of federal interference and mandates.	Appendix Coordination— FEMA/NRC/State	Appendix, page A-1	Disagree. Supplement 3 is a joint NRC/FEMA document. No change.
11	38	Timing for Supplement 3 is not appropriate - should wait until census information has been published.	2010 Census/ ETE guidance		Agree. Implementation will await census and revised evacuation time estimates (ETEs). No change.

Comment #	ID	Comment	Keyword	Section/ Page	Adjudication
12	43	Since the development of Protective Action Recommendations is largely based on Evacuation Time Estimates and this rulemaking will require licensees to release updated ETEs within one year of finalization of US Census data, it would be prudent to wait for 2010 Census data to be available for use in ETEs to ensure that proposed changes can be properly applied with the highest possible degree of validity.	2010 Census/ ETE guidance		Agree. Implementation will await census and revised ETEs. No change. (Letter to Chairman—NRC sent memo response.)
13	44	Duke Energy is requesting final implementation of Supplement 3 be completed after Evacuation Time Estimates (ETE) are updated since the PAR Logic Diagram requires data not available in current ETEs.	2010 Census/ ETE guidance		Agree. Implementation will await census and revised ETEs. No change.
14	10 12 8E10 38E10 41E10 51E10 38E10	The development of Protection Action Recommendations in NUREG-0654-REP-1, Rev1, Supplement 3 (Draft) is largely based on Evacuation Time Estimates (ETEs) for each nuclear power plant site. As you are aware, the NRC is in the process of rulemaking changes that will affect the frequency and scope of ETE studies. The rulemaking will require licensees to develop new ETEs within one year of the finalization of national census data. The US is currently in the process of taking a national census and new ETE studies will be initiated once the NRC Rule is final and the 2010 census data is completed. It would be appropriate to wait to move forward on this guidance until the NRC rule change regarding ETEs is final and 2010 census data is completed to ensure the best application of the proposed changes.	2010 Census/ ETE guidance		Agree. Implementation will await census and revised ETEs. No change.
15	14 55	The development of the initial protective action recommendation to evacuate versus shelter-in-place will require knowledge of Evacuation Time Estimates for 90% of the population (ETE90%). This information may not be readily available and may require significant resources for the States to obtain the data. Additional guidance may be required to use existing data based on ETE 100% or other values and derive the ETE90%. Once again, it appears the NRC has not talked with the FBI concerning the use of "texting", "blogs", "Face book", etc. and the NRC needs to do so immediately. In addition, using these forms of communication with the public all take manpower which many agencies just do not have. Further, use of cell phones is already frowned upon by FEMA and cell towers could be overloaded by mass texting and by public use in contacting family members, etc. This recommendation has not been well thought out or researched. Potential Impact: The Feds need to talk with each other... what happened to the Federal Fusion Center?	2010 Census/ ETE guidance		Agree. Implementation will await census and revised ETEs. No change.
16	8		Coordination— FEMA/ NRC/State Public outreach Not constructive		Agree in part. The guidance only recognizes the existence of additional media channels and does not require their use. Ignoring these channels may detract from emergency response. Clarify wording. Note: The staff does not understand the reference to the FBI.

Comment #	ID	Comment	Keyword	Section/ Page	Adjudication
17	43	<p>Page A-18- last bulleted paragraph "Under the National Response Framework, DHS/FEMA assumes overall coordination of an incident if it progresses to a General Emergency. As Federal agencies, such as DHS/FEMA, become integrally involved in the incident the public should be informed that these are planned actions, to avoid necessary confusion. If this is in fact the case, other than a request from the State, similar to current Stafford Act procedures for assistance or the POTUS or DHS Secretary declares the incident necessitates the NRF implementation, what resources can DE or other states receive to "coordinate" the General Emergency. Having been involved in federally graded exercises since 1980, I have never seen a FEMA "coordinating element" participate in a drill or graded exercise other than evaluators. Please provide me with the Standard Operation Procedures to address the specific FEMA "coordinating element(s) staffing, duties, and responsibilities. I further request the specific functions that the "Coordination elements" will be evaluated in during our federally graded exercises. Therefore, DEMA can proactively integrate this information into our Radiological Emergency Preparedness Plan and our Incident Action Plan template as it pertains to Radiological emergencies.</p>	Coordination— FEMA/NRC/State	Appendix, page A-18	Disagree. Comment is not applicable to Supplement 3 under consideration. No change.
19	55	<p>If state or local decision makers disagree with the NRC/FEMA logic in Supplement 3 and continue to take an alternative approach to protective actions, what will be the NRC's/FEMA's response? It states, "The NRC does not require precautionary protective actions in response to Site Area Emergency or lesser emergency classifications. However, OROs at many sites already plan precautionary actions upon declaration of a Site Area Emergency..." It is strongly recommended that NRC consult with its Federal counterpart, FEMA, concerning this statement. While FEMA may deny it, it has been our experience that FEMA wants to see precautionary protective actions at the SAE and if none are taken during exercises, then it becomes a planning issue or worse, to ensure that actions are taken at the SAE.</p>	Coordination— FEMA/NRC/State		Agree. Offsite response organizations (OROs) will revise plans and submit them for approval. Performance in accordance with approved plans is always acceptable. Supplement 3 does not replace ORO authority for protective actions. Change wording.
18	8 38E8	<p>Potential Impact: Creates confusion between what one Federal agency states and another then mandates.</p>	Coordination— FEMA/NRC/State Precautionary protective actions	Page 6, first sub-paragraph	Disagree. Supplement 3 is a joint NRC/FEMA document. No change.

Comment #	ID	Comment	Keyword	Section/ Page	Adjudication
20	8 38E8	<p>It appears this is once again an NRC attempt to "back-door" the States and locals in order to get the States and locals to conform with NRC and FEMA views by applying pressure to the utilities. Potential Impact: Continued loss of trust between the Federal Regulators and States and locals.</p>	<p>Coordination— FEMA/NRC/State Not constructive</p>		<p>Disagree. The revision of Supplement 3 has been discussed extensively in presentations at FEMA/NRC/industry meetings as follows: 4/05, NREP, Harrisburg, PA, Protective Action Recommendation (PAR) Study presented 3/06, NREP, St. Louis, MO, PAR Study presented 7/07, HP Convention, Portland, OR, PAR Study presented 12/7, RI Scheduling Conference, Atlantic City, NJ, PAR Study presented. 1/08, Tristate Meeting, Wakefield, MA, PAR Study presented 4/08, NREP, Las Vegas, NV, two sessions to discuss details of draft PAR Logic Diagram (ORO input generated significant changes) 12/8, RI Scheduling Conference, Mystic, CT, Draft Supplement 3 presented 2/09, RIV TOP Workshop, Fort Worth, TX, Draft Supplement 3 presented 4/09, NREP, Norfolk, VA, Draft Supplement 3 presented 6/09, NEI Conference, Bonita Springs, FL, Draft Supplement 3 presented 10/09, RV FEMA Conference, Lisle, IL, Draft Supplement 3 presented 3/10, RIC, Bethesda, MD, Draft Supplement 3 presented 3/10, NRC/FEMA Progress Meeting, Annapolis, MD, Draft Supplement 3 presented 4/10, NREP, Chicago, IL, Draft Supplement 3 presented 3/10, NRC/FEMA, Public Meeting, Bethesda, MD, Draft Supplement 3 presented 6/10, NRC/FEMA, Public Meeting, La Crosse, WI, Draft Supplement 3 presented 7/10, Wilmington, DE, Draft Supplement 3 presented 7/10, Tampa, FL, Draft Supplement 3 presented The 150-day comment period extended from March 8 to August 8, 2010, and about 350 comments were collected. This document was developed with significant public input. No change.</p>

Comment #	ID	Comment	Keyword	Section/ Page	Adjudication
44	7	As "The PAR Study found that General Emergencies are unlikely events. A General Emergency followed by severe core melt is even more unlikely, and a General Emergency where the containment would rapidly fail is still more unlikely..." Why did the NRC demand in the DRAFT Supplement 4 and FEMA in its FEMA Program Manual that the licensee and OROs have exercises involving basically "Fast-Breaker" incidents???? Potential Impact: Again, results in a great distrust of Federal agencies and anything said or represented by them.	Coordination— FEMA/ NRC/State Not constructive	Page 6, paragraph 1	Disagree. "Fast breaker" does not necessarily mean a radiological release, although that scenario remains within the emergency preparedness (EP) planning basis. The EP Rule proposes a rapid site area emergency (SAE) or general emergency (GE), not necessarily core melt or containment failure. No change.
26	17	The IPC has long been a supporter and proponent of active ORO-Licensee relationships as we believe this is the best way to protect the public's health and safety during a radiological emergency. However, we also believe that our Federal partners must continue to work together to support these relationships by providing logical and reasonable guidance supporting the clearly defined oversight roles of FEMA and the NRC over the OROs and Licensees respectively. Many of the proposed requirements in this supplement require the licensee to establish plans that clearly fall into the offsite emergency response arena, and may result in unintended consequences during an actual emergency. Further, offsite jurisdictions are not subject to NRC regulations and guidance and will not be required to implement changes being imposed upon licensees.	Coordination— FEMA/ NRC/State ORO vs. licensee responsibility		Disagree. Supplement 3 is a joint NRC/FEMA document. No change.
42	20	Our fourth comment is that NUREG-0654/FEMA-REP-1, Rev. 1, Supplement 3, "Guidance for Protective Action Recommendations for General Emergencies"; Draft for Comment is a multi-agency document that requires DHS/FEMA endorsement. Yet, there has been minimal HS/FEMA involvement in this process that we can see from a stakeholder perspective. Since the guidance has a significant impact on offsite response organization plans and procedures, it would seem prudent to have DHS/FEMA endorsement prior to publication.	Coordination— FEMA/ NRC/State		Disagree. The FEMA Administrator approved Supplement 3 for public comment and will consider approval of the final version. No change.
27	22	Coordination with FEMA: The document as published is not consistent with the newly proposed REP Program Manual that FEMA is currently reviewing the public comments on. There does not appear to have been coordination between FEMA and the NRC on the off-site requirements proposed in the Supplement 3 document which will result in conflicting guidance. We recommend that joint FEMA and NRC outreach meetings be conducted and the agencies explain how the new off-site requirements would be implemented. We would also like to see additional outreach meetings prior to the finalization of Supplement 3 document.	Coordination— FEMA/ NRC/State Public outreach		Disagree. Supplement 3 is a joint NRC/FEMA document. Four joint FEMA/NRC outreach meetings were held. No change.

Comment #	ID	Comment	Keyword	Section/ Page	Adjudication
29	22	<p>Implementation timeline: The document does not contain any information about the implementation timeline. There should be public comment sought on the timeline for implementation prior to finalization of the document. NUREG-0654/FEMA-REP-1, Rev. 1, Supplement 3, "Guidance for Protective Action Recommendations for General Emergencies"; Draft for Comment is a multi-faceted document that requires many off-site requirements and needs DHS/FEMA endorsement. There does not appear to have been any DHS/FEMA, utility or Off-site Response Organization (ORO) involvement in the development of this proposal. Since the guidance has a significant impact on offsite response organization plans and procedures, it would seem appropriate to have DHS/FEMA endorsement and stakeholder input prior to final publication.</p> <p>Page A-18, last paragraph. The language contained in this section seems to indicate that DHS/FEMA will assume overall control of the incident once a NPP declares a General Emergency. The National Response Framework (NRF), Chapter 1: Roles and Responsibilities, pg 24, last paragraph, states "When the overall coordination of Federal response activities is required, it is implemented through the Secretary of Homeland Security consistent with Homeland Security Presidential Directive (HSPD) 5. Other Federal departments and agencies carry out their response authorities and responsibilities within this overarching construct. Nothing in this Framework alters or impedes the ability of Federal, State, tribal, or local departments and agencies to carry out their specific authorities or perform their responsibilities under all applicable laws, Executive orders, and directives." Recommend amending the first sentence of the paragraph to read as follows; "... DHS/FEMA assumes overall coordination of Federal response activities during an incident..."</p>	Coordination— FEMA/ NRC/State Implementation		Disagree. Supplement 3 is a joint NRC/FEMA document. Implementation will be coordinated with the EP rulemaking and provide time for upgraded ETEs to be developed. No change.
30	25	<p>Para 2.4. The language used is not in sync with what is currently being considered in the draft REP Program Manual. Recommend coordinating draft documents with FEMA to minimize the likelihood of conflicting guidance.</p> <p>While this document is titled as a Supplement to a joint NRC/FEMA document, all the research data, survey information and drafting has been accomplished solely by NRC. Although the language indicates input from State and local government emergency response professionals, stakeholders, and industry, far too much of the document shows having been written by NRC Staff with insufficient or no review and coordination by FEMA, State & Local REP stakeholders. The final wording is NRC directive in nature. Strongly recommend that following current Federal Register Review, NRC with FEMA adjudicate the comments and provide ALL state and local government emergency response professionals, stakeholders, and industry stake holders a second review period of no less than 75 working days.</p>	Coordination— FEMA/ NRC/State	Appendix, page A-18	Agree but not with suggested wording. The revision will state deference to ORO authority. Change in wording.
45	25		Coordination— FEMA/ NRC/State	Appendix	Disagree. Supplement 3 is a joint NRC/FEMA document and is being coordinated fully. No change.
31	29		Coordination— FEMA/ NRC/State Regulatory significance	Section 1, page 2	Disagree. A 150-day comment period was provided; NRC will resolve comments. No change.

Comment #	ID	Comment	Keyword	Section/ Page	Adjudication
32	29	<p>This paragraph states that this Supplement is to be considered "Federal Guidance" as listed in Title 10 of the Code of Federal Regulations (10 CFR) 50.47(b)(10). The following statement, "By issuing this guidance, the NRC..." directly indicates that this document is solely an NRC directive document, NOT a joint NRC/FEMA document. It is an NRC document, the Communications Appendix needs to be removed and the applicability to the wording determined by FEMA. If this information is to be used by Off-site Response Organizations (ORO) the it should be published as a part of the REP Program manual or as a separate FEMA PIO guidance document. This is an overt attempt by NRC to directly influence and direct Off-Site activity which is outside its sphere of influence.</p>	<p>Coordination— FEMA/ NRC/State Appendix</p>	<p>Section 1, page 3</p>	<p>Disagree in part. Supplement 3 is a joint NRC/FEMA document. Portions of Appendix A guidance will be deleted or moved to a future revision of NUREG-0654 and/or Radiological Emergency Preparedness (REP) program manual. Change in wording.</p>
33	37	<p>Draft Supplement 3 makes no reference to the Draft FEMA REP Program Manual that was issued for comment in May, 2009 and does not state that NRC and FEMA will assure that final technical guidance on protective actions for the public is coordinated in a consistent manner for licensees and OROs. The proposed Supplement 3 guidance will significantly impact ORO plans and procedures, and yet does not have the formal endorsement of FEMA. This is worrisome to OROs because the implementation of draft Supplement 3 may ultimately conflict with the proposed revisions to the FEMA REP Program Manual which is now undergoing adjudication. The implementation timeline of the revised Supplement 3 should await the published results of the comment adjudication process, particularly as it applies to the implementation of Planning Standards I and J, and ETE-related guidance contained in the REP Program Manual.Rationale: Licensees and OROs are expected to discuss and presumably agree on acceptable PAR strategies. However, until the Supplement 3 guidance receives formal FEMA endorsement, OROs will be reluctant to commit to significant departures from established PAR philosophies methodologies.</p>	<p>Coordination— FEMA/ NRC/State Implementation</p>		<p>Disagree. The FEMA Administrator approved Supplement 3 for public comment and will consider approval of the final version. Implementation of Supplement 3 will be coordinated with the EP Rule implementation. No change.</p>
36	38	<p>There appears to be no evidence of FEMA's review or concurrence to the Supplement 3 guidance.</p>	<p>Coordination— FEMA/ NRC/State</p>		<p>Disagree. The FEMA Administrator approved Supplement 3 for public comment and will consider approval of the final version. No change.</p>
37	38	<p>Transit dependent - informational materials should include - how long residents may expect to wait for pickup, when bus runs will start, why residents are safe outside. It appears that a booklet is required in order to include all the items listed for the public information and the EAS messages, these requirements need to be included in the REP Manual part II. As they are not currently in the docketed manual, these documents contradict each other. FEMA and NRC need to work together to meld their documents into a working system.</p>	<p>Coordination— FEMA/ NRC/State Public messaging</p>	<p>Appendix, page A-9</p>	<p>Agree. This information will be relocated. Change wording.</p>

Comment #	ID	Comment	Keyword	Section/ Page	Adjudication
34	39	<p>I Rick Ayers Emergency Manager for Harford County, Maryland just completed the L-340 REP Program and Planning Course. This document as published is not consistent with the newly proposed REP Program Manual that FEMA is currently reviewing and asking for public comments on. For example: the revised PAR logic is not referenced in the plan review or exercise evaluation criteria and "there are no references to the proposed supplement 3 or its processes in the REP program manual." Was there coordination between FEMA and the NRC on the off-site requirements proposed in the Supplement 3 document which will result in conflicting guidance? I currently chair the PBAPS (Peach Bottom Atomic Power Station) Risk County Coordination Committee and recommend that joint FEMA and NRC outreach meetings be conducted and the agencies explain how the new off-site requirements would be implemented. As Chairman of our local committee, I would agree to host these outreach meetings in Harford County, Maryland. I would request that these meetings be held prior to the finalization of the Supplement 3 document.</p>	<p>Coordination— FEMA/ NRC/State Public outreach</p>		<p>Agree. Implementation meetings are planned and can be held as requested. No change.</p>
35	39	<p>The document does not contain any information about the implementation timeline. There should be public comment sought on the timeline for implementation prior to finalization of the document. NUREG-0654/FEMA-REP-1, Rev. 1, Supplement 3, "Guidance for Protective Action Recommendations for General Emergencies"; Draft for Comment is a multi-faceted document that requires many off-site requirements and needs DHS/FEMA endorsement. There does not appear to have been any DHS/FEMA, utility or Off-site Response Organization (ORO) involvement in the development of this proposal. Since the guidance has a significant impact on offsite response organization plans and procedures, it would seem appropriate to have DHS/FEMA endorsement and more stakeholders input prior to final publication.</p>	<p>Coordination— FEMA/ NRC/State Implementation</p>		<p>Disagree. Supplement 3 is a joint NRC/FEMA document. Implementation will be coordinated with EP Rule implementation. No change.</p>
38	43	<p>Language used is not consistent with the draft REP Program Manual. Recommendation is to coordinate with FEMA to minimize the likelihood of conflicting guidance. The guidance is unclear as to what constitutes heightened preparedness and the subsequent message may add citizen confusion with all of the messaging already being implemented.</p>	<p>Coordination— FEMA/ NRC/State Heightened preparedness</p>	<p>Intro paragraph, section 2.4</p>	<p>Disagree in part. Supplement 3 is a joint NRC/FEMA document. "Heightened preparedness" will be changed. Change in wording.</p>
39	43	<p>The information in this appendix applies to ORO's and is not applicable to the utilities, other than information coordinated based on licensee conditions including health and safety hazards. This information has always been under the oversight of FEMA in its REP 2002 Planning Guidelines. It now appears that the NRC and FEMA must adjudicate this specific area. Confusion between Federal agencies, states, and the licensee if left in the proposed document will lead to misunderstanding and ultimately confusion. This issue must be addressed, agreed to, and incorporated within the final rule.</p>	<p>Coordination— FEMA/ NRC/State</p>	<p>Page A-1</p>	<p>Disagree. The FEMA Administrator approved Supplement 3 for public comment and will consider approval of the final version. No change. (Letter to Chairman—NRC sent memo response.)</p>

Comment #	ID	Comment	Keyword	Section/ Page	Adjudication
41	54	<p>The Alabama Emergency Management Agency has reviewed the proposed changes to Supplement 3 and recommends a more coordinated review of this document between FEMA and the NRC in order to avoid publishing conflicting guidance. The NRC is responsible for the oversight of on-site, licensee, emergency preparedness plans. How off-site emergency response organizations execute their plans is outside of the regulatory scope of the NRC. A distinction needs to be made whether this document will be used as guidance for the OROs, or if the recommendations made by the NRC are just recommendations. If this document is intended to be used as guidance there needs to be additional clarification on how FEMA will utilize it to access the adequacy of off-site emergency plans and the implementation schedule that OROs will need to adhere to. Although the document states that it is a joint effort between the NRC and FEMA, it references little to no input or comments from FEMA. This can be seen as the NRC dictating planning standards to OROs.</p>	<p>Coordination— FEMA/ NRC/State Regulatory significance</p>		<p>Disagree. The FEMA Administrator approved Supplement 3 for public comment and will consider approval of the final version. No change.</p>
28	10 12 8E10 38E10 41E10 51E10	<p>NUREG-0654/FEMA-REP-1, Rev. 1, Supplement 3, "Guidance for Protective Action Recommendations for General Emergencies"; Draft for Comment is a multi-agency document that requires DHS/FEMA endorsement. Yet, there has been no DHS/FEMA involvement in this process that we can see from a stakeholder perspective. Since the guidance has a significant impact on offsite response organization plans and procedures, it would seem prudent to have DHS/FEMA endorsement prior to publication.</p>	<p>Coordination— FEMA/ NRC/State</p>		<p>Disagree. Supplement 3 is a joint NRC/FEMA document, and FEMA supported public outreach meetings. No change.</p>
40	48 57E48	<p>The document blurs the lines between the licensee and the OROs. Licensee and ORO actions are discussed concurrently. It is not always clear which entity is expected to have the responsibility. Many issues traditionally under the auspices of the ORO (i.e., impediments to evacuation) now have to be considered by the licensee and/or discussed with the ORO during the PAR process.</p>	<p>Coordination— FEMA/ NRC/State ORO vs. licensee responsibility</p>		<p>Disagree. The FEMA Administrator approved Supplement 3 for public comment and will consider approval of the final version. No change.</p>

Comment #	ID	Comment	Keyword	Section/ Page	Adjudication
22	7	<p>Overall, this is a good first attempt at revising portions of NUREG-0654. Unfortunately this revision uses too much draft documentation, academic theory & concept combined with computer simulation without support from empirical data. Far too much of the document shows having been written by NRC Staff with insufficient or no review and coordination by FEMA. Information and recommendations provided in the Appendix is valuable and instructive, but it goes beyond the scope of the US Code of Federal Regulations or NRC/FEMA MOU documents. There is a definite difference between emergency planning guidance issued by FEMA for OROs and the legally established regulatory planning standards dictated by the NRC for nuclear power facilities. That distinction becomes very blurred when information such as this is written and published in an NRC authored document. Considering the amount of change in this document recommends for the REP program and the information basis it wants to use, i.e. 2010 national census combined with subsequent site ETEs, I request that NRC seriously consider retracting this document from public review and await the results of these efforts and a more complete and thorough review and coordination period with FEMA.</p>	<p>Coordination— FEMA/ NRC/State Regulatory significance 2010 Census/ ETE guidance</p>		<p>Disagree. Supplement 3 is a joint NRC/FEMA document. Implementation will await the upgraded ETEs based on the 2010 census. No change.</p>
24	838E8	<p>The last sentence of this paragraph states, "This communications appendix is intended to be fully consistent with, and complementary to, the Federal Emergency Management Agency (FEMA) guidance." Maybe the NRC has some idea what the FEMA guidance is, or is going to be, but at the present time, FEMA has failed to publish via the Federal Register, the public comments on the draft of the FEMA Program Guidance Manual or publish the actual manual itself. So how can NRC say the appendix is fully consistent with and complementary to FEMA guidance. In addition, how can the NRC and we, the general public, intelligently comment on this statement. Right now, NRC guidance may not be consistent with, and complementary to, FEMA guidance. Potential Impact: Creates confusion between what one Federal agency states and another then mandates.</p>	<p>Coordination— FEMA/ NRC/State Not constructive</p>	<p>Page A-1</p>	<p>Disagree. The NRC and FEMA coordinate regulatory actions. No change.</p>

Comment #	ID	Comment	Keyword	Section/ Page	Adjudication
25	8 38E8	<p>The paragraph states, "Heightened preparedness should be formally established as a protective action. The alert and notification that occurs by sounding sirens (or other alerting devices) and broadcasting EAS messages initiates the implementation of a heightened preparedness for those within the EPZ. Public information material should describe the concept of heightened preparedness, introduced in this update to Supplement 3." It seems that FEMA already requires this, at least informally, at the Site Area Emergency by demanding that the States follow up the EAS message with a Special News Broadcast Message on what precautionary protective actions should be taken, what actions are being taken by state and local authorities, etc. If NRC was not aware of this, maybe closer consultation with FEMA counterparts would be in order. The State of Nebraska does not feel formalizing "Heightened Preparedness" as a protective action is necessary and formalizing it would just create an additional unnecessary burden on both the States and Local Governments. It would also create confusion as there is no guidance as to "when" NRC would desire to see "Heightened Awareness" used as a protective action which leaves the door wide open for subjective analysis by FEMA during exercises. Potential Impact: One Federal Agency not talking with the other. Would create confusion as to when to put "official 'Heightened Preparedness' protective action in place".</p>	<p>Coordination— FEMA/ NRC/State Heightened preparedness</p>	<p>Page A-7, paragraph 3.1</p>	<p>Disagree. Warning the public to prepare will increase public safety for the many reasons stated in Supplement 3 and NUREG/CR-6953, "Review of NUREG-0654, Supplement 3, 'Criteria for Protective Action Recommendations for Severe Accidents.'" However, the wording will change.</p>

Comment #	ID	Comment	Keyword	Section/ Page	Adjudication
43	838E8	<p>It appears that the horse has already left the barn, in that NUREG 0654, Supplement 4 (Draft) already out for review, basically puts into practice what the Introduction of NUREG 0654, Supplement 3 Draft 2010 would like to have put into practice. Potential Impact: Thus we have "fait accompli"</p>	<p>Coordination— FEMA/ NRC/State Not constructive</p>	<p>Page 1, Section 1</p>	<p>Disagree. The revision of Supplement 3 has been discussed extensively in presentations at FEMA/NRC/industry meetings as follows: 4/05, NREP, Harrisburg, PA, PAR Study presented 3/06, NREP, St. Louis, MO, PAR Study presented 7/07, HP Convention, Portland, OR, PAR Study presented 12/7, RI Scheduling Conference, Atlantic City, NJ, PAR Study presented 1/08, Tristate Meeting, Wakefield, MA, PAR Study presented 4/08, NREP, Las Vegas, NV, two sessions to discuss details of draft PAR Logic Diagram (ORO input generated significant changes) 12/8, RI Scheduling Conference, Mystic, CT, Draft Supplement 3 presented 2/09, RIV TOP Workshop, Fort Worth, TX, Draft Supplement 3 presented 4/09, NREP, Norfolk, VA, Draft Supplement 3 presented 6/09, NEI Conference, Bonita Springs, FL, Draft Supplement 3 presented 10/09, RV FEMA Conference, Lisle, IL, Draft Supplement 3 presented 3/10, RIC, Bethesda, MD, Draft Supplement 3 presented 3/10, NRC/FEMA Progress Meeting, Annapolis, MD, Draft Supplement 3 presented 4/10, NREP, Chicago, IL, Draft Supplement 3 presented 3/10, NRC/FEMA Public Meeting, Bethesda, MD, Draft Supplement 3 presented 6/10, NRC/FEMA Public Meeting, La Crosse, WI, Draft Supplement 3 presented 7/10, Wilmington, DE, Draft Supplement 3 presented 7/10, Tampa, FL, Draft Supplement 3 presented The 150-day comment period extended from March 8 to August 8, 2010, and about 350 comments were collected. This document was developed with significant public input. No change.</p>

Comment #	ID	Comment	Keyword	Section/ Page	Adjudication
23	8E38	<p>It states, "The NRC does not recommend that precautionary protective actions be automatic at the Site Area Emergency level.... The NRC recommends that OROs consider implementation of precautionary protective actions appropriate for their locale following a Site Area Emergency declaration after conferring with licensee personnel regarding the nature of the event and the likelihood of core degradation." Again, it is strongly recommended that NRC consult with its Federal counterpart, FEMA, concerning this statement. While FEMA may deny it, it has been our experience that FEMA wants to see automatic precautionary protective actions at the SAE and if none are taken during exercises, then it becomes a planning issue or worse, to ensure that actions are taken. In addition, during a recent HAB exercise where it has been the Dept. of Health's SOP to call the control room to ascertain plant status, the plant personnel now state that control room personnel may be too busy to talk with State personnel during such incidents. So, NRC, how are State personnel to confer with licensee personnel to determine appropriate protective actions? Potential Impact: Creates confusion between what one Federal agency states and another then mandates. Creates confusion on what NRC says and what the States and locals are to do. Also it creates confusion as to what the NRC says and what the Utilities say they can do.</p> <p>Paragraphs 4.2.2.1; 4.2.2.2; 4.2.2.3; 4.2.2.4; 4.2.2.5; and 4.2.2.6</p>	<p>Coordination— FEMA/ NRC/State</p> <p>Precautionary protective actions</p>	<p>Page 7, paragraph 2.3, third sub-paragraph</p>	<p>Disagree. The guidance states that if operators are too busy to discuss the issue, precautionary protective actions should be implemented as thought best. No change.</p>
21	8 38E8	<p>Talk about confusing the public! Based on NRC guidance, one could put out a message requiring a School Evacuation, immediately followed by a Staged Evacuation Message for the 2-mile area, but wait, moms and dads are rushing to get their kids from school, and now fighting traffic from the two mile area. Then the Shadow evacuation message goes out, and now the people in the two-mile area aren't sure if they are supposed to evacuate or if they are to remain in place. This doesn't count the Transit Dependent Evacuation Message, the Special Needs Residents Not Residing in Special Facilities or the Special Facilities Evacuation Messages which also could add confusion and broadcast time so that one cannot get the "Staged Evacuation" message repeated at all! Potential Impact: NRC needs to understand that flooding the public with too many messages in a short period of time on too many subjects is going to cause mass confusion.</p>	<p>Coordination— FEMA/ NRC/State</p> <p>Not Constructive</p>	<p>Appendix, page A-15 to A-17</p>	<p>Disagree. There is no "message" for school evacuation broadcasts to the public, and staged evacuation messages should contain the shadow evacuation information. Transit evacuation messages should follow as appropriate. No change.</p>

Comment #	ID	Comment	Keyword	Section/ Page	Adjudication
46	5	<p>Once the site's PAR is finalized, are there any thoughts to enacting an online, centralized database which will maintain all site specific PARs for public use? This would help promote one message for emergency evacuation procedures, standardize training for the public, and give the utilities and ORO's ready access to source documents. This way the public could type in their home address to find out which evacuation zone they are in, when/how to evacuate, and understand the fundamentals of staged evacuation. Also, this website should be tied into social media, as this can be an effective way to provide updates.</p>	Document availability		Agree. This is a good way for OROs to use the Internet to communicate with the public. No change.
49	18	<p>In order to adequately review and comment on NUREG-0654/FEMA-REP-1, Rev. 1, Supplement 3, Guidance for Protective Action Recommendations for General Emergencies; Draft for Comment, at least two documents necessary for the technical review of the draft guidance are not available. One being the 2010 National Census and the other being the subsequent ETEs which could greatly impact the development of site specific PAR logic diagrams and should be considered more carefully in the implementation schedule. And there are no indications that DHS/FEMA has endorsed or supports the draft guidance. Based on these observations, I request that NRC seriously consider retracting this document from public review and await the results of these efforts and a more complete and thorough review and coordination period with FEMA, then reissue the guidance once these concerns are addressed. At a minimum, cited documents should be made available in final form and the comment period extended to allow adequate time to evaluate the technical basis and applicability to NUREG-0654/FEMA-REP-1, Rev. 1, Supplement 3, Guidance for Protective Action Recommendations for General Emergencies</p>	Document availability 2010 Census/ ETE guidance		Disagree. Supplement 3 is coordinated with FEMA; implementation will await upgraded ETEs based on 2010 Census. No change.
50	20	<p>The Illinois Emergency Management Agency (IEMA) believes the efforts of the Nuclear Regulatory Commission (NRC) to revise the current draft guidance contained in NUREG-0654, Supplement 3: Guidance for Protective Action Recommendations is a positive step to update this guidance based on insights gained in Emergency Preparedness. The importance of this fundamental document for Protective Action Recommendations and the infrequency of its revision require that stakeholders have adequate time-to consider the impact the State of the Art Reactor Consequence Analyses (SOARCA) may have -on Supplement 3 to NUREG-0654. It is our understanding that a draft of the, SOARCA results will soon be released in at least draft form. IEMA believes that it is essential the results of the SOARCA be reviewed and considered in any effort to upgrade Supplement 3. Therefore, IEMA is requesting at least a 60-day extension be granted for comments on draft NUREG-0654, Supplement 3. This additional time is necessary to thoroughly review the results of the SOARCA study and the proposed changes to NUREG-0654, Supplement 3 and to interpret the new draft guidance and its impact on our current protective action decision</p>	Document availability Positive!		Agree. The extension has been granted. The reference to State of the Art Reactor Consequence Analyses (SOARCA) will be removed. Change in wording.

Comment #	ID	Comment	Keyword	Section/ Page	Adjudication
		making and implementation process.			
51	29	<p>This is a DRAFT document and as such should not be used as basis for a guidance document. If the information contained in this document is so vital to the guidance provided here, the review and publishing of Supp 3 MUST be delayed until this document is approved and published IAW current Federal publishing guidelines.</p> <p>A key supporting document listed under the Supplement 3 references, NUREG/CR-0653 Volume III, has not yet been issued for public review and comment. Given that this document is an important underpinning of the NRC's proposed PAR guidance, it is essential that the information be made available to all stakeholders for understanding and validation of the Supplement 3 recommendations. Furthermore, it has been universally suggested that NUREG-0654, Rev. 1, in existence since 1980, should be rewritten in its entirety. Therefore, the implementation schedule for Supplement 3 should encompass as a minimum the final issuance of Volume III. Optimally, Supplement 3 guidance should be integrated into a comprehensive NUREG-0654 revision. Doing otherwise, represents a "piecemeal" and inefficient approach. NRC should extend its planned Supplement 3 implementation schedule accordingly. Rationale: It is inappropriate for the NRC to request comments and proceed with the Supplement 3 implementation process when organizations impacted by this change have not had the opportunity to review all of the supporting information. Implementation of the revised Supplement 3 guidance should be issued at a later time as an integrated, comprehensive package to avoid needless duplication of effort in the future.</p>	Document availability	Section 6, References, page 15	Agree. The documents are provided. No change.
52	37		Document availability NUREG/CR-6953, Vol. I, II, and/or III Final EP Rule	Section 6, page 15	Agree. Supplement 3 may eventually be incorporated into a revised NUREG-0654. However, that change will take years, and the revised Supplement 3 will replace a draft document in the meantime. No change.

Comment #	ID	Comment	Keyword	Section/ Page	Adjudication
53	43	<p>NUREG-0654/FEMA-REP-1, Rev. 1. Supplement 3 makes reference to a document entitled NUREG/CR-6953, Vol. III, "Review of NUREG-0654, Supplement 3, 'Criteria for Protective Action Recommendations for Severe Accidents. Technical Basis for Protective Action Logic Diagram.'" NRC: Washington, D.C. 2010 Draft. Since the reference indicates that document is in draft form, we feel that it is inappropriate to publish guidance based on the findings of a draft document that is not currently available for public reference.</p> <p>The Effective Communication with the Public to Support Emergency Preparedness and Response Appendix "is intended to be fully consistent with, and complementary to, the Federal Emergency Management Agency (FEMA) guidance" page A-i. With the interim REP manual currently under review it is difficult to ensure consistency between the proposed rulemaking. Until final changes are made to all draft or interim guidance it is impossible to avoid multiple future revisions and to ensure consistency. References to studies that are currently in draft form, under review, or unpublished need to be made available to stakeholders so that they can provide an adequate and informed review of the proposed changes. (Examples: Page 6 - "Licensee emergency plans are designed to support mitigative actions to ameliorate plan accidents, and an ongoing NRC study, (the State of the Art Reactor Consequence analysis, yet unpublished) concludes that mitigative actions will likely be successful." Pages 9 and 15- Nuclear Regulatory Commission (U.S) (NRC) NUREG-6953 Vol. III "Review of NUREG-0654, Supplement 3, 'Criteria for Protective Action Recommendations for Severe Accidents. Technical Basis for Protective Actions Logic Diagram'" NRC: Washington, D.C. 2010 Draft. Pages A-3 and A-20 - Federal Emergency Management Agency (FEMA) "Interim Radiological Emergency Preparedness (REP) Program Manual." FEMA: Washington D.C. August 2002)</p>	<p>Document availability NUREG/ CR-6953, Vol. I, II, and/or III</p>		<p>Disagree. The document has been made available. No change. (Letter to Chairman—NRC sent memo response.)</p>
54	54		<p>Document availability</p>	<p>Appendix</p>	<p>Disagree. Supplement 3 is coordinated with FEMA. The documents are provided. The reference to SOARCA will be removed. No change.</p>

Comment #	ID	Comment	Keyword	Section/ Page	Adjudication
55	55	<p>At the time the current NUREG-0654 was issued, WASH 1400 or the Reactor Safety Study was considered to be the definitive reference to characterize and quantify reactor accidents and their consequences. At the same time NUREG-0396, Planning Basis for the Development of State and Local Government Radiological Emergency Response Plans in support of Light Water Nuclear Power Plants, laid the foundation for the emergency planning basis or the 10-mile EPZ. Today, our knowledge of severe reactor accidents has greatly progressed where results from the Reactor Safety Study are now known to be unrealistic. The NRC has recognized this with their current efforts to more accurately characterize the consequences of a reactor accident by funding the SOARCA (State of the Art Reactor Consequence Analyses) Project. Although this project is not yet complete, the results are scheduled to be published before Supplement 3 to NUREG-0654 is issued in final form. IEMA feels that it is vital that Supplement 3 to NUREG-0654 incorporate the insights provided in the SOARCA study. The two conclusions presented at the March 11, 2009 Regulatory Information Conference, 1) "For unmitigated sensitivity cases-no LERF" and 2) "Releases are dramatically smaller and delayed from 1982 Siting Study (SSTI)", eliminate many of the benefits of shelter as a protective action strategy and lessen the importance of evacuation time estimates in determining the optimum protective action strategy. At a minimum the proposed PAR strategy in Supplement 3 to NUREG-0654 should undergo a sensitivity analysis to determine if, based on the new insights from SOARCA, the process can be simplified to create a more easily implemented PAR chart yielding consistent implementation and thereby greater public health and safety in the unlikely event of a severe nuclear power plant accident.</p>	Document availability		Disagree. SOARCA will not be published in final form before Supplement 3. SOARCA is an important effort, but does not address all defense-in-depth issues that the EP planning basis covers. The NRC staff is pursuing additional studies to enhance the EP planning basis. While the techniques used in SOARCA will inform that work, it does not address the complete spectrum. No change.
56	55	<p>Our fifth comment has to do with the timing of Supplement 3 to NUREG-0654. In May of last year a massive number of Emergency Preparedness documents including the rule change on Emergency Planning and Preparedness as well as guidance on Evacuation Time Estimates were issued for review. The final disposition of the comments on these documents will determine what the final regulations and guidance will be on Emergency Planning and Preparedness. It would be prudent to issue Supplement 3 for comment after the final rule and guidance on Emergency Planning and Preparedness is issued.</p>	Document availability Final EP Rule 2010 Census/ ETE guidance		Agree. Implementation will await enhanced ETEs. No change.
47	10 11 12 8E10 38E10 41E10 51E10	<p>Page 6 of this document states "Licensee emergency plans are designed to support mitigative actions to ameliorate plant accidents, and an ongoing NRC Study, (the State-of-the-Art Reactor Consequence Analysis, yet published) concludes that mitigative actions will likely be successful." It is impossible to evaluate the validity of the conclusions drawn from the State-of-the-art Reactor Consequence Analysis until it is published. Therefore, it is inappropriate to publish this document for comment until all</p>	Document availability	Page 6	Agree. The reference will be removed. Change in wording.

Comment #	ID	Comment	Keyword	Section/ Page	Adjudication
		reference materials are made available for review.			
48	10 11 8E10 38E10 41E10 51E10	Section 6, References, lists the supporting documents for the draft NUREG-0654/FEMA-REP, Rev.1, Supplement 3. One of the documents listed is NUREG/CR 6953 Vol. III. "Review of NUREG-0654, Supplement 3, 'Criteria for Protection Action Recommendations for Sever Accidents. Technical Basis for Protective Action Logic Diagram.'" NRC: Washington, D.C. 2010 Draft. It would appear from the title this document is critical to the review and validation of the draft NUREG-0654/FEMA-REP-1, Rev. 1, Supplement 3 since it provides the technical basis. Yet the reference indicated that it is still in draft form. Further investigation has revealed that the document is not currently available for public review. Again, it is inappropriate to publish guidance documents such as NUREG-0654/FEMA-REP-1, Rev. 1, Supplement 3 based on a draft document that is not publically available for reference.	Document availability NUREG/CR-6953, Vol. I, II, and/or III	Section 6	Disagree. Volume 3 is available on the NRC Web site and on www.regulations.gov . No change.
57	55	The straight line Gaussian model used in the MACCS2 program for consequence calculations that form the technical basis behind the new Supplement 3 is outdated and does not reflect the current understanding of atmospheric transport and dispersion as referenced in the NRC's current dose assessment program RASCAL. The RASCAL dose or consequences are generally lower than the results calculated by MACCS2. Straight line Gaussian models tend to be overly conservative and would not be representative of actual real world dose to the population. The dispersion parameters used in RASCAL 4.0 are now a function of time and atmospheric turbulence and produce lower, more realistic concentrations. The consequence calculations that form the technical basis to Supplement 3 to NUREG-0654 should be redone using current dose modeling techniques such as those used by RASCAL 4.0.	Dose assessment models		Disagree. The consequences identified in the PAR Study were compared to the consequences of other strategies to identify the most protective PAR strategies. Any difference in models would probably normalize, and the relative ranking would be similar. No change.
62	32	The draft Supplement 3 focuses a great deal on communication with the public and suggests many additions to Emergency Alert System (EAS) messages and public information materials. Will the current two minute limit on EAS messages be expanded to accommodate the new information recommendations, or is it expected that the new information will be communicated to the public via supplemental news broadcasts?	EAS messages		Agree. The draft should not have referenced the emergency alert system (EAS); the intent was to describe supplemental news bulletins by officials. Change in wording.
64	38	With all the "shoulds" and the excessive amounts of information suggested to be in public information and EAS messaging, no time frame has been implemented for these items.	EAS messages	Appendix	Agree. However, guidance will not be so detailed as to specify a timeframe. No change.

Comment #	ID	Comment	Keyword	Section/ Page	Adjudication
65	43	<p>Appendix: Section 2.1</p> <p>Public Response- Emergency Alert System (EAS) messages are limited to a specific time frame and message content. Multiple media mediums must support the EAS information in defining the program elements outlined in 2.1. In the fourth bullet, delineated in time add "and complete". The message reads: Inform the public how long they have to implement and complete protective actions and why the time is important.</p> <p>Section 4.1: Initial Alert and Notification Most EAS message limits range from 1:30 to 2:00 minutes in length. It is difficult to create messages that provide clear, concise, and consistent with public information materials. The inclusion of heightened awareness, staged evacuation, and shelter-in-place messaging as well as information for special assistance groups and parent reunification from schools may exceed the time limit available. As with heightened preparedness and staged evacuations, these new concepts to the current PAR/PAD options should not be initially established as a required messaging. It should be implemented over time to ensure that appropriate educational materials for the OROs as well as the general public can be developed.</p>	EAS messages	Appendix, pages A-2, A-3	Agree. This information should be in supplemental news bulletins. Change in wording.
63	50	<p>Any information more than the 2 minute EAS message will be put out to the public through the Joint Information Center via the Public Information Officer. The excessively prescriptive guidance for messaging for the various groups (schools, special needs, transients) suggests that the general public does not have common sense. If all the suggested information for all the various groups is put out to the public in Special Information Bulletins/informational bulletins during an emergency, a message would never be complete.</p> <p>More specifically, the following items are necessary for assembling effective public warning messages (Mifeti, 2000). Define a "public warning message". Is it an EAS message? EAS Messages are limited to 2 minutes due to the Encoder memory capacity. Any information in excess of the two-minute EAS message will be disseminated through the joint message Information Center via Special News Bulletins and/ or Special Information Bulletins.</p>	EAS messages		Agree. The implementation period will be published with the document. No change.
61	24 23		EAS messages Not constructive	Appendix	Agree. The draft should not have referenced EAS; the intent was to describe supplemental news bulletins by officials. Change in wording.
60	24 23 27		EAS messages	Appendix, page A-2	Agree. The draft should not have referenced EAS; the intent was to describe supplemental news bulletins by officials. Change in wording.

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58	838E8	<p>Bullet # 4 states "Time--Inform the public how long they have to implement protective actions and why the time is important. In most instances, immediate and urgent response would not be needed, and messages should convey that residents have time to prepare and evacuate." If the message says evacuate the area by such and such a time, and then something unforeseen happens requiring the sirens to sound and another message to go out saying evacuate immediately, it creates doubt in the public's mind about whom to trust. If there is not an urgent need to evacuate, then tell the public they may need to evacuate later and prepare for such a contingency. Don't tell them they have to evacuate and give them a time. Potential Impact: Following NRC direction leaves States and locals wide open to public distrust and severe criticism.</p> <p>"Sheltering-in-Place Message"</p>	EAS messages	Appendix, Page A-2	Agree. Change in wording.
59	838E8	<p>In Sub-Paragraph 2, it states, "Messages should address locations at which people might be sheltering such as at home, work, or other locations." Whoever is writing this must be new to the Radiological Emergency Preparedness (REP) program. One would think that adults living and/or working in the 10-mile EPZ of a nuclear power station would know where and if necessary how to "shelter-in-place". Also, if one does not know then it would seem prudent that as an adult, one would ask or look in the public information brochure. To have to load an alert warning and notification message down with extraneous information, detracts from the most important fact that one is directed to seek shelter immediately. Potential Impact: This statement could very well be considered an affront to those people who live and work within the 10-mile EPZ as well as to the State and Local Planners who deal with such considerations every day.</p>	EAS messages Not constructive	Appendix, A-13	Disagree. The PAD for sheltering in place (SIP) should be more specific so that people seek immediate shelter. No change.
68	29	<p>REVISE/REWRITE what is the difference between the licensee and the ERO? As written, these appear to be two separate and distinct groups with no connection. This verbiage goes back to the confusion created in the opening paragraphs of this section – what utility/licensee organizations are we discussing – the on-shift control room staff / the ERO (or portions of) / etc – are we discussing. There seems to be direction being given to the licensee in lines 6-10 that the 15 minute requirement from Paragraph 1 is paramount at this time in an event.</p> <p>Appendix Section 4: 4.2.2.1- 4.2.2.6</p>	Editorial/ Verbiage	Section 2, Sub-paragraph 2, lines 3-10, page 5	Agree. Change in wording.
66	37	<p>Several useful messaging suggestions are embedded in the text of these sections (which focus on pets, staged evacuation, school evacuation, shadow evacuation, transient dependent people, special needs people, and special facilities). We recommend that the key messaging elements be presented as more concrete recommendations in a "bullet" format for ease of use.</p> <p>Rationale: Comment presented to improve usability of the</p>	Editorial/ Verbiage	Appendix, pages A-6, A-7, A-15 to A-17	Agree. However, most of that guidance is being removed. Change in wording.

Comment #	ID	Comment	Keyword	Section/ Page	Adjudication
		messaging guidance.			
67	37	<p>Appendix Section 5 Page A-1 9, states: "A better approach is to ensure adequacy of the available systems and for emergency response agencies to use these services as well, to provide additional information to the public".</p> <p>The wording as stated could be expanded into more specific, concrete recommendations on how to implement guidance on how available communications services can be used.</p> <p>Rationale: Comment presented to improve usability of the messaging guidance.</p>	Editorial/ Verbiage	Appendix, A-19	Agree. Change in wording.
69	37	<p>The proposed guidance focuses on radial distances from the plant. However licensees and OROs usually translate PARs and PADs into ERPAs or other locally identified sub-areas. The proposed Supplement 3 should state explicitly that PAR revisions can use existing ERPAs or sub-areas and that the NRC and FEMA are not requiring reconfiguration of current boundaries. Rationale: Suggested wording would assist in ORO understanding and acceptance of the intended scope of Supplement 3 revisions.</p>	Editorial/ Verbiage	Section 1, page 5	Agree. Change in wording.
70	38	<p>"Should" - A constant problem in the regulatory world of REP. It is increasingly interpreted as "shall." Define it correctly before this is mandated.</p>	Editorial/ Verbiage		Agree. This is a guidance document and not regulation; "shall" is not appropriate for use in this document unless it reflects a regulation. No change.
71	38	<p>There are a lot of places this document used the terms like "may be appropriate.", "it is prudent to do ..." or "it is desirable to ..." followed by "it is not required ..." these tones are more for suggestions and not for the regulatory requirement.</p>	Editorial/ Verbiage		Agree. That is the intent. No change.
72	38	<p>"This is prudent thing to do" ... "This guidance should in no way be interpreted as countermmanding these commitments which may exist in licensing-basis documents or in State Emergency plans." – these two statements contradict each other</p>	Editorial/ Verbiage	Section 2.3, page 7	Disagree. Specific language is needed for regulatory commitments that may run counter to guidance (e.g., Seabrook Station). No change.
73	38	<p>"It may be appropriate for licensees to perform a wind persistence analysis to determine if the site specific PAR logic diagram should include more than three downwind sectors when a downwind evacuation of about 2 to 5 miles is recommended." – does this statement mean that licensee could go ahead and evacuate more than three downwind sectors based on the Wind Persistence Analysis? Or this guidance is not required based on the term "may be appropriate"?"</p>	Editorial/ Verbiage	Section 2.4, page 7	Agree. The analysis is not required, but may be appropriate. The intent is permissive, not directive. No change.

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74	43	A definition of General Emergency should be incorporated within the Supplement 3 document.	Editorial/ Verbiage	Section 2.1	Disagree. The definition has not changed. No change.
78	44	The proposed guidance in NUREG-0654 Supplement 3 and PAR Logic Diagram needs to be more clear as to which decisions are to be made during the planning phase and which decisions are to be made during event response.	Editorial/ Verbiage		Agree. Change in wording.
77	53	Recommend changing "... is designed to be implemented rapidly..." to "... is designed to be utilized rapidly...". Use of the term implemented suggests that the PAR procedure must lead to a decision. The decisions are made by the offsite response organizations (OROs).	Editorial/ Verbiage	Section 2, paragraph 1	Agree. Change in wording.
75	55	The proposed Supplement 3 to NUREG-0654 does not have a "Purpose and Use of Document" section like the current draft Supplement 3. This section should be added and in particular the statement, "Nuclear Power Plant licensees and State and local emergency response organizations may use the updated and simplified guidance in this document or alternately, they may continue to use previous guidance." needs to be included in this Purpose section as it is in the current draft Supplement 3 to NUREG- 0654.	Editorial/ Verbiage		Agree, in part. The staff will clarify expectations and the process for changes, but not with the wording suggested. Change in wording.
76	48 57E48	Glossary should be expanded to include additional terms such as: safer to do so, GE conditions remain, severe accident, rapidly progressing severe accident, etc.	Editorial/ Verbiage	Glossary	Disagree. These terms are common usage. No change.
79	48 57E48	The document further states "This guidance recognizes the disparity between a severe accident and a General Emergency and requires evacuation (or shelter-in-place as appropriate) of the closest population; it provides a decision point for increasing protective actions after that initial protective action." The PAR logic diagram includes a rapidly progressing severe accident. Is this different from a severe accident to r are all severe accidents rapidly progressing? Please clarify.	Editorial/ Verbiage	Section 2.1	Agree. However, the document is referring to the "severe" accidents as used in the initial box of the current Supplement 3 logic diagram. No change.
80	48 57E48	The document states that a wind persistence analysis is recommended when site meteorology includes shifting wind directions on a time scale that is less than the ETE for the downwind sectors. Note 4 of the PAR logic diagram says that one may need to evacuate more than 3 sectors wide when wind persistence analysis shows wind shifts more often than ETE for downwind sectors. Which ETE should be used for this analysis? How much variation in wind direction is needed to decide that additional sectors are warranted? How does one determine how many more sectors are needed?	2010 Census/ ETE guidance Meteorology	Section 2.4	Agree. However, the guidance is permissive, not directive. The utility dose assessment experts should be able to help with this determination. OROs would not be expected to perform this analysis. No change.

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81	48 57E48	The document states that "For sites where the 90-percent ETE for the general public of the full EPZ is less than about 3 hours, results showed that, for the rapidly progressing scenario, evacuation is, the most appropriate protective action" and "2 to 5 mile (3.2 to 8 kilometer zone)- If the 90 percent ETE for this area is 3 hours or less, immediately evacuate." However Note 9 of the PAR logic diagram bases decisions on a <2 hour ETE for the 2 mile EPZ and a <3 hour ETE for 2-5 miles in the downwind sectors. These statements should be consistent. Please revise document accordingly.	2010 Census/ ETE guidance	Section 3	Agree. The latter is based on more detailed analysis. Change in wording.
82	48 57E48	Note 7 states that the licensee should evaluate the need to expand the PAR based on plant conditions at the site specific 2-mile, 90% ETE and that this evaluation should be done by shift staff without conferring with OROs. At most sites, the 2-mile, 90% ETE is longer than the amount of time needed for the licensee to get their augmented ERO in place, therefore this evaluation would not be made by shift personnel. Please revise the document accordingly.	2010 Census/ ETE guidance PAR Logic Diagram	Attachment Note 7	Disagree. This is a contingency, but at many sites, the augmented emergency response organization (ERO) could be in place in this timeframe during daytime hours. No change.
83	48 57E48	Note 7 states that only day and nighttime ETEs should be considered. However, some sites have weather or special events that significantly change their ETEs. If the requirement for ETE consideration when making PARs remains in the document, it should be revised to state that the licensee should use the most appropriate ETE for the time of the emergency.	2010 Census/ ETE guidance PAR Logic Diagram	Attachment Note 7	Disagree. The ETEs noted cover most of the situations that could be encountered. Complicating the logic will not improve public health and safety. OROs will be aware of any impediments or special events and would modify PADs accordingly. No change.
84	48 57E48	Note 9 describes various evacuation/sheltering scenarios for a rapidly progressing severe accident. These times are inconsistent with the text in section 3 of the document. Please revise the document accordingly or explain the discrepancy.	2010 Census/ ETE guidance PAR Logic Diagram	Attachment Note 9	Disagree. The two sections provide the results of the PAR Study. Very few if any sites have a 10-mile emergency planning zone (EPZ) ETE of 3 hours, but if they do, then immediate evacuation is the best PAR. No change.
85	43	After extensive research, we have been unable to find any indication that DHS/FEMA has endorsed this draft guidance. The language used in Supplement 3 is not consistent with what is contained in the Draft of the REP Program Manual.	Coordination— FEMA/NRC/State		Disagree. The FEMA Administrator approved Supplement 3 for public comment and will consider approval of the final version. If there are inconsistencies, they should be identified for correction. No change. (Letter to Chairman—NRC sent memo response.)
86	33	Page 3 states that Supplement 3 is the guidance to follow to meet the requirements of 10 CFR 50.47(b)(10). However, it also states that by issuing this guidance, the NRC does not intend to affect the protective action guidelines developed and promulgated by the U.S. Environmental Protection Agency (EPA). The EPA protective action guides remain the appropriate Federal guidance on radiological criteria for consideration of protective actions. OPPD's position is that it would be better to incorporate both sets of guidance into a single document to prevent confusion and potential regulatory issues.	Guidance coordination	Page 3	Disagree. Supplement 3 incorporates the U.S. Environmental Protection Agency (EPA) guidance. There is no need to combine documents because the EPA document addresses incidents beyond nuclear power plant accidents. No change.

Comment #	ID	Comment	Keyword	Section/ Page	Adjudication
88	53	The NRC should communicate the inspection criteria for the basis document. The inspection guidance should address possible ambiguity that may exist in the decision basis document. As an example, this could involve reconciliation of differences in PAR guidance that may exist between sites that have comparable EPZs but different local OROs?	Regulatory significance		Disagree. This document does not contain inspection guidance. No change.
87	55	Has the NRC evaluated the impact that changing this guidance may have on other existing guidance such as the RTM?	Implementation		Disagree. This guidance will govern the revision of the RTM where appropriate. No change.
90	22	Heightened preparedness messages The proposed Supplement 3 language requires new and additional messaging about heightened preparedness all areas around a plant. The guidance is unclear as to what constitutes a heightened preparedness message and the message may be confusing with all of the messages already being made. We recommend the language in Supplement 3 requiring heightened preparedness messages be removed because it is duplicative of the messaging that already occurs. Heightened Preparedness. This new term is unique to this document. In discussions with the various stakeholders, there was a concern expressed on how to communicate the term. Many felt that the term is to [sic] difficult to communicate to the public. While the intent of the term as another "tool" in the protective actions toolbox, ORO's would not want to be required to use the specific term when communicating the protective action to the public. They would like to have the flexibility to use a term that would provide the same intent of Heightened Preparedness but be easier to communicate to the public. Recommend including the definition of the terms "Shall" and "Should." This came up in discussions on the draft REP Program Manual. Most agree that NUREG-0654 needs to provide a more precise understanding as to what is required versus what is recommended or encouraged. NUREG-1379 Rev 2 (p. 35) states that, "In regulations, "shall" and "will" indicate a requirement, "may" an option, and "may not" a prohibition. "Shall" and "will" are used for persons or organizations; "must" for inanimate objects. In guidance such as regulatory guides, "should" is often used for recommendations." It is the understanding of our State and Counties that NUREG-0653 Supplement 3 is a guide rather than a regulatory document.	Heightened preparedness		Disagree. The term was changed, but this state of preparedness will enhance public response. Change in wording.
91	25		Heightened preparedness Regulatory significance	Section 5	Agree. The term has been changed. "Shall" and "should" are in common usage, and since Supplement 3 is guidance, "shall" will be used only when referring to a regulatory requirement. Change in wording.
94	38	"Heightened preparedness" is such excessive terminology. Think simpler.	Heightened preparedness Not constructive	Section 1, page 2	Agree. A different term has been used. Change in wording.
95	38	Heightened preparedness – not clear on meaning or should this term included in OROs plan. If this is implemented, it would change not only plans but also Public Education should reflect that as well	Heightened preparedness Public outreach	Section 2.3, page 7	Agree. A different term has been used. Change in wording.

Comment #	ID	Comment	Keyword	Section/ Page	Adjudication
93	39	<p>Heightened preparedness: What does this mean? The proposed Supplement 3 language requires new and additional messaging about heightened preparedness for all areas around a plant. The guidance is unclear as to what constitutes a heightened preparedness message and the message may be confusing with all of the messaging already being made. Harford County already uses additional messaging to our citizens through our Emergency Notification System. I recommend the language in Supplement 3 requiring heightened preparedness messages be removed because it is duplicative of the messaging that already occurs and is very unclear.</p>	Heightened preparedness EAS messages		Agree in part. A different term has been used. The concept can enhance public compliance. Change in wording.
92	51	<p>The Florida REP Task Force held its annual meeting on July 19th-21st, in Tampa. I was fortunate to be able to participate in the NRC public meeting that was also held in Tampa on the evening of July 21st. I spoke publicly the NRC meeting about the term "heightened awareness". Essentially my comments were that this new term "heightened awareness" needs to be simplified because nobody will understand it. I recommended something like "stay informed" as an alternative term. In fact I really wanted to elaborate on my comments further, but failed to do so at that time. So my elaboration is that government officials should endeavor to keep every protective action message/instruction as simple as possible. In that regard, "heightened awareness" or "stay informed" should always be a general standing order during an emergency; not a new protective action.</p> <p>Consider my rationale: the words evacuate and shelter, are verbs, hence they are actions. That's simplicity.</p> <p>Panicked people will know what those terms mean. "Heightened awareness" however, is a state of being which I believe would be best described by as an adjective. That's too confusing to be a protective action for panicked people during an emergency. I strongly recommend that the use of term "heightened awareness" be stricken as a new protective action.</p>	Heightened preparedness		Agree. A different term has been used. Change in wording.
98	55	<p>Our second comment has to do with "heightened preparedness". We believe that this is not a Protective Action Strategy but rather falls under the planning standard for Alert and Notification of the public. Heightened Preparedness" should be completely removed as a Protective Action.</p> <p>Should licensees be unable to provide this assessment, the prudent action would be to implement precautionary protective actions.</p> <p>Heightened preparedness is one appropriate precautionary protective action. "Heightened Preparedness" should not be called a protective action since the word action suggests "TAKING ACTION" - THE ACT OF DOING SOMETHING. Heightened preparedness is planning ahead/now for AN EMERGENCY, not only for a radiological emergency.</p>	Heightened preparedness		Disagree. Precautionary protective actions are intended to avoid or reduce dose should a release actually occur. No change.
89	24 23 27		Heightened preparedness	Section 2.3	Disagree. Heightened preparedness would involve not engaging in outdoor activity, not leaving home, packing for evacuation, reuniting family, returning home, closing home or business, and monitoring. These are in fact protective actions that reduce evacuation time, should evacuation be necessary. No change.

Comment #	ID	Comment	Keyword	Section/ Page	Adjudication
96	48 57E48	Section 2.3 defines Heightened Preparedness as a precautionary protective action; however, the glossary defines it as a protective action. Heightened Preparedness should be defined as a precautionary action since it does not result in decreased dose.	Heightened preparedness Precautionary protective actions	Section 2.3	Disagree. Precautionary protective actions are intended to reduce or avoid dose should a release actually occur. No change.
97	48 57E48	Heightened Preparedness is not a protective action. It is a precautionary action. Please revise. The Federal Notice announcing the Public Comment period makes no mention of a proposed timeline for implementation of the document. Recommend providing a NRC-suggested implementation timeline as part of this comment process. The document does not appear to have been adequately coordinated between FEMA and the NRC. Additionally, the REP-community was not involved or consulted in the development of the changes prior to implementing the Public Comment process. The Federal Public Comment process essentially allows only one chance to make any comment on documents. There is no feedback provided to the stakeholders following the comment period until the final document is published. Additionally, there are no opportunities to gather suggestions from the community prior to the public comment period. There are many experienced and competent people in the REP community that would be eager to work with the NRC and FEMA up front to develop/revise guidance that would meet the requirements of the NRC as well as being more transparent and inclusive of the REP community, the nuclear industry, and the Public.	Heightened preparedness Precautionary protective actions	Glossary	Disagree. Precautionary protective actions are intended to avoid or reduce dose should a release actually occur. No change.
101	25		Implementation Coordination— FEMA/NRC/State		Disagree. Supplement 3 is a joint NRC/FEMA document. The agencies held multiple meetings and gave many presentations on this subject and received and resolved over 300 comments. The implementation period will be coordinated with the new EP Rule and the availability of upgraded ETEs. Implementation workshops are planned to support OROs. No change.
99	38	No implementation time frame has been noted for Supp 3. As new concepts to the current PAR/PAD options the integration of this option should not be initially established as a protective action. It should be implemented over time to ensure that appropriate educational materials for the OROs as well as the general public can be developed. It will also take time to integrate into established protective action procedures and changes made to current ORO plans, policies, procedures and public messaging.	Implementation		Agree. Implementation will be coordinated with EP Rule implementation. No change.
103	50		Implementation Public outreach	Sections 3.1 and 3.3	Agree. The implementation schedule will provide time for revision, and workshops are planned. No change.

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102	53	<p>The implementation guidance needs to address- The implementation / evaluation process that should be employed for any changes made. For example, will they be made using 10 CFR 50.54q? 10 CFR 50.90? 10 CFR 50.4? And why? - The required timing of the changes. For example, will the completion date be tied to completion of the Evacuation Time Estimate (ETE) updates? - The trigger mechanism for implementing this change. For example, will this be through an Order, Rule requirement, or Generic Letter? - Whether the trigger mechanism will be "static" or "dynamic." Is this a onetime change? Made annually? Made every 5 years? Made every 10 yrs? Will it be tied to the census and ETE update? Or, will there be some other quantitative criteria such as an ETE population change by a specific amount?</p> <p>The implementation guidance should take into consideration the ORO and/or licensee resource availability to undertake this analysis / decision making activity concurrent with the EP rule change coincident with other changes undertaken by OROs to address Department of Homeland Security incident response.</p> <p>The implementation guidance should communicate FEMA's and the NRC's expectations regarding the dialogue with the state and local OROs and whether it is to be conducted in a "public" venue? If conducted in public and depending on the local populace and the presence of vocal critics, what measures will be in place to ensure decisions are made based on science and not politics or lack of political will?</p> <p>The implementation guidance should establish whether the revised PAR logic diagrams will be subject to public input? Review? Intervention?</p>	Implementation 2010 Census/ ETE guidance		Agree. The staff will clarify issues. Change in wording.
104	53		Implementation Final EP Rule		Agree. Implementation time will be given to allow orderly development. No change.
106	53	<p>Monroe County Assessment: Based upon our review of the proposed Supplement 3 Technical details, we are concerned about requirements and the timing of the NRC's intended final implementation of Supplement 3 requirements. Specifically, the Federal Register notice for Supplement 3 will be based upon revisions to site-specific ETEs. It is unlikely that these revisions will be available by mid-2012. Revisions of ETEs must be based upon the availability of 2010 Census data and upon methodologies dictated by new ETE rulemaking requirements. Neither is finalized at this time. Monroe County Position- We recommend that NRC implementation timelines/ schedules allow time to coordinate with FEMA guidance, revise documents and train both licensee and ORO personnel.</p>	Implementation	Attachment	<p>Disagree. It is expected that these mature organizations can work together on a procedure without direction from the Federal Government regarding how to hold meetings and make decisions.</p> <p>The NRC will inspect and FEMA will evaluate implementation. No change.</p>
105	57		Implementation 2010 Census/ ETE guidance		Agree. Time will be given to allow orderly development, and implementation will await the enhanced ETEs required by the rule change. No change.

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100	48 57E48	The implementation schedule is not realistic. There are multiple rulemakings in progress and multiple guidance documents under revision. There needs to be coordination of these efforts such that licensees and OROs can have all of the necessary information available to revise their procedures. A specific example is the need to consider evacuation time estimates (ETEs) in the revised PAR methodology. All licensees will need to revise their ETEs based on the new ETE rulemaking and 2010 census. The schedule for implementation of the revised PAR methodology should take the timetable for completion of these other efforts into consideration.	Implementation 2010 Census/ ETE guidance Shelter in place		Agree. Implementation will await enhanced ETEs. No change.
108	29	ADD THE FOLLOWING (IF NOT DELETED AS PREVIOUSLY RECOMMENDED): Lateral evacuation - evacuation method where evacuation movement is perpendicular to the direction of the plume Staged evacuation – evacuation method where the close-in population evacuates first while others shelter-in-place and wait before evacuating. Shelter-in-place – evacuation method where residents shelter at home or in their current location followed by radial evacuation at a later time. Preferential sheltering – evacuation method where individuals use large public structures for Shelter-in-place followed by a radial evacuation	Lateral evacuations Preferential sheltering	Section 5, Glossary, page 13	Agree in part. The staff will define all terms in accordance with definitions used in the PAR Study. Change in wording.
107	38	Lateral evacuation (90 degree angle to the plume) may result in evacs not going to designated reception centers which will require updated EAS messages	Lateral evacuations		Agree. However, this is an option, not a requirement. No change.
109	38	NRC does not expect any demonstration of lateral evacuation – FEMA is the lead agency for outside the fence.	Lateral evacuations Coordination— FEMA/ NRC/State Lateral evacuations		Agree. No change.
110	38	Lateral Evacuation – is this one of the recommended method of evacuating people or is it just an option that licensees or OROs can utilize? Is it more effective than current radial evacuation strategy?	Regulatory significance	Section 1, page 1	Agree. This is an option for consideration where appropriate. It is not required. No change.
111	48 57E48	Use of wind persistence data in the PAR decision-making process seems to negate the use of actual meteorology and forecast information. It would seem that using actual meteorology would be most protective of the public. Please describe how actual meteorology/ forecast data and wind persistence information would be used when making PARs. The document states that "Extreme weather conditions such as inversion, significant precipitation or no wind can change the efficacy of shelter-in-place and make evacuation the preferred protective action. The PAR logic diagram guidance reflects the consideration of weather." The PAR logic diagram only mentions wind persistence not other weather phenomena. Please provide guidance on how these other weather phenomena should be addressed.	Meteorology	Section 2.4	Agree. The wind persistence analysis is not required, but only suggested for sites with variable wind. Should it be necessary, it would result in the expanded PAR, encompassing additional sectors or planning areas. As an automatic action, it would not be based on actual meteorology. No change.
112	48 57E48		Meteorology PAR Logic Diagram	Section 3	Agree. Change in wording.

Comment #	ID	Comment	Keyword	Section/ Page	Adjudication
1116	29	DELETE ALL These are evacuation concepts that are only supported by academic theory (telephone surveys) and computer model simulation. There is no existing empirical evacuation data that supports or suggests the concepts especially when applied to evacuation for a technological hazard such as radiation.* Lateral evacuation, which is evacuation perpendicular to the plume (This concept is heavily dependent on the local roadway network and detailed pre-evacuation planning along with being highly related to the population density of the evacuation area.) * Staged evacuation, where the close-in population leaves first while others shelter-in-place and then leave.* Shelter-in-place, where residents shelter at home or in their current location followed by radial evacuation.* Shelter-in-place, followed by lateral evacuation.* Preferential sheltering, which includes use of large public structures followed by radial evacuation.* Preferential sheltering, followed by lateral evacuation	NUREG/CR-6953, Vol. I, II, and/or III Staged evacuation	Section 1, subparagraph 3, page 1	Disagree. Staged evacuation is widely used in emergency response as studied in NUREG/CR-6864, "Identification and Analysis of Factors Affecting Emergency Evacuations," issued January 2005. No change.
1113	55	NUREG/CR 6953, Volume 3, TECHNICAL BASIS FOR PROTECTIVE ACTION STRATEGIES, uses completely different source terms than the ones used in Volume 1 of NUREG/CR 6953. Volume 3 states, "Accident sequences from ongoing NRC projects were reviewed but not useful for this study because the studies reviewed did not find any credible rapidly progressing accidents." It is not clear why this decision was made to use non credible accidents and why no references were cited for these accidents.	NUREG/CR-6953, Vol. I, II, and/or III		Disagree. The source terms represent the staff's best available information. The basis documents are not public information. No change.
1114	55	Volume 3 of NUREG/CR 6953 is the technical basis behind Supplement 3 to NUREG-0654 but the only accident analyzed is the so called fast breaker for a medium to high population density EPZ with uniform population density. The results therefore are applicable only to an accident that cannot happen according to SOARCA and an EPZ that does not exist in Illinois and is far from representative of most EPZs.	NUREG/CR-6953, Vols. I, II, and/or III Fast break accidents		Disagree. Actual but unnamed sites were used. The population density was not uniform as it was in the PAR Study. The study's purpose was to identify criteria for SIP for large early release (LER). Low-population sites would not have helped in that effort and will use the criteria identified in PAR logic. No change.
1115	55	The title of Volume 3 of NUREG/CR-6953, "TECHNICAL BASIS FOR PROTECTIVE ACTION STRATEGIES," does not match the stated objective on page 1. "The objective of the Volume 3 analysis was to establish a technical basis for developing PAR guidance for rapidly progressing accidents and to establish criteria for determining the most appropriate protective action recommendations and decisions for these events." This scope is too narrow in that it only considers one type of accident which cannot even be quantified as it is deemed non credible. This leaves the question unanswered as to what the technical basis was for most of the flowchart from Supplement 3 to NUREG-0654. As Volume 3 is currently written it only provides the technical basis for the left hand column of the flowchart in Supplement 3.	NUREG/CR-6953, Vol. I, II, and/or III PAR development		Disagree. The EP planning basis includes LER, even though it is unlikely. Volume 3 of the PAR Study uses recently developed source terms to analyze PAR strategies. No change.

Comment #	ID	Comment	Keyword	Section/ Page	Adjudication
117	55	<p>The two accidents used for the study the ST-1 and ST-2 are described on pages 33-34 of Volume 1 of NUREG/CR-6953. The descriptions don't match the technical descriptions in the Appendix pages A-1-A-2. Just using ST-1 as described on pages 33-34 the time of 40 minutes(2.4E3) seconds and release duration of 6 hours (2.16E5 seconds) differs from page A-1 with a start time of 1.8E3 seconds and two releases with a time of 1.8E3 and 2.2E4 seconds respectively. The two releases added together are about an order of magnitude less in duration than what is stated on pages 33-34. There are similar problems for ST-2 on page A-2. The numbers matter very much as the main conclusion is based on these inputs.</p> <p>There are problems with the way MACCS2 does staged evacuation. Again from page 33 of the NUREG for a 4 hour ETE MACCS2 assumes an evacuation time of 6.8 mph for staged evacuations in the 0-2 mile ring as opposed to the speed of 2.5 mph for a radial evacuation. If you increase your speed by a factor of almost 3 you will decrease your dose by a factor of 3 also. It is no wonder staged evacuation is an improvement over radial evacuation. Of course they assume uniform population density, never the case in real life.</p>	<p>NUREG/ CR 6953, Vol. I, II, and/or III</p>	<p>Pages 33-34, A-1 and A-2</p>	<p>Agree. No change.</p>
118	55	<p>Utility requirement to conduct an assessment of off-site conditions prior to making a Protective Action Recommendation (PAR). The proposed Supplement 3 language requires the utility to make an assessment of off-site conditions like road conditions and traffic impediments and consider those conditions when making a Protective Action Recommendation and consider sheltering verses evacuation for these types of conditions. Minnesota does not concur that the assessment of off-site conditions is a responsibility of the utility and believes strongly the utility recommendations should be based on the on-site conditions and the science of potential exposure based on the release rate. The utility does not have authority or resources to evaluate off-site conditions and make Protective Action Recommendations based on off-site conditions in a timely manner. Implementation of the proposed Supplement 3 will result in delays in development of Protective Action Recommendations and implementation of Protective Action Decisions. We recommend the language in Supplement 3 requiring the utility to consider off-site conditions when making a Protective Action Recommendation is removed.</p>	<p>Staged evacuation</p>		<p>Agree. No change.</p>
119	22		<p>ORO vs. licensee responsibility PAR development</p>		<p>Agree. The ORO can relieve the licensee of that responsibility. No change.</p>

Comment #	ID	Comment	Keyword	Section/ Page	Adjudication
123	25	Notes 2 and 8 of the Protective Action Recommendation Logic Diagram Notes discuss impediments to evacuation. It requires the ERO to determine if these conditions exist as they might require the PAR be modified to incorporate the restrictions. In the discussions amongst our ORO's, they all felt that the ERO should not take the time to consider impediments since this would likely delay the notification and associated PAR. They felt that the NPP should base their PAR on plant conditions. It is the responsibility of the ORO's to make the Protective Action Decision in the event of an incident at a NPP. They have the resources and responsibility to determine what the most appropriate course of action to protect the public health would be. We recommend that the requirement for the NPP to consider offsite conditions when making a PAR be deleted. REWRITE – Change to read as follows: "Licensee emergency plans are designed to support actions to mitigate plant accidents. While a licensee is responsible for declaring a General Emergency and issuing a PAR, the licensee is not directed to make recommendations as to terminating a protective action previously given to the public by the OROs. The licensee is responsible for down grading the General Emergency ECO when due to mitigation actions the General Emergency criterion is no longer applicable. Such down grade action should not be accomplished without consultation both internal and external to the site. Action to downgrade an emergency should be expected to take sufficient time as to ensure that plant conditions will remain stable and safe both during and following conferences with local authorities." "However, in no case does the NRC intend that nuclear power plant [sic] licensees delay the recommendation of protective actions to confer with OROs at the time of a General Emergency." First you say you want the plants to confer and agree with OROs, then the next sentence is negating the need.	ORO vs. licensee responsibility PAR Logic Diagram	Section 2	Agree. Supplement 3 recommends that these planning decisions be coordinated with OROs in advance of an emergency. OROs may relieve licensees of the need to consider road conditions and hostile action or timing factors. However, the licensee would immediately know of hostile action and GE timing, and there would be no significant delay in making a PAR. No change.
120	29	"[sic] licensees delay the recommendation of protective actions to confer with OROs at the time of a General Emergency." First you say you want the plants to confer and agree with OROs, then the next sentence is negating the need.	ORO vs. licensee responsibility	Section 2, 2.2, page 6	Agree, in part. The staff will revise the wording to clarify the explanation of the process for termination of the GE. Change in wording.
124	38	Utility requirement to conduct an assessment of off-site conditions prior to making a Protective Action Recommendation (PAR): The proposed Supplement 3 language requires the utility to make an assessment of off-site conditions like road conditions and traffic impediments and consider those conditions when making a Protective Action Recommendation and consider sheltering verses evacuation for these types of conditions. Harford County, Maryland does not concur that the assessment of off-site conditions is a responsibility of the utility and believes strongly the utility recommendations should be based on the on-site conditions and the science of potential exposure based on the release rate. The utility does not have authority or resources to evaluate off-site conditions and make Protective Action Recommendations based on off-site local level and should not be considered in the proposed Supplement 3 document and will result in longer delays in development of Protective Action Recommendations and implementation of	ORO vs. licensee responsibility	Section 2, page 5	Disagree. Organizations should confer when planning, not during the event. No change.
121	39		ORO vs. licensee responsibility PAR development		Agree. The ORO can relieve the licensee of that responsibility. No change.

Comment #	ID	Comment	Keyword	Section/ Page	Adjudication
		Protective Action Decisions. Harford County recommends the language in Supplemental 3 requiring the utility to consider off-site conditions when making a Protective Action Recommendation is removed.			
125	43	Offsite Response Organizations (OROs) have prescribed precautionary protection actions based on citizen health & safety issues at a Site Area Emergency declaration. This action is based on the foregoing and allows for citizen protection which may include but not be limited to persons with disabilities, day cares, schools, and nursing homes. This is a governmental decision only. The licensee may recommend, however, the government having jurisdiction ultimately recommends, approves, executes, and terminates actions based on health and safety criteria. Utility requirement of conducting a logic assessment of off-site conditions prior to making a Protective Action Recommendation (PAR) for planning purposes is supported. However, the implementation of the PAR taking in consideration of offsite conditions including road conditions, traffic impediments, and consideration of sheltering-in-place verses evacuation for these types of conditions are purview of the authority having jurisdiction. We recommend the language in Supplemental 3 requiring the utility to consider off-site conditions when making a Protective Actions Recommendation be removed.	ORO vs. licensee responsibility	Section 2.3	Agree. Licensees will not make PARs at an SAE. OROs have only the authority to make PADs. Supplement 3 suggests that OROs pause to assess the situation before implementing any action, based on experience since Three Mile Island. No change.
126	43	This appears to imply a shift in responsibilities from the ORO to the utility to promulgate modified protective action recommendations (PARs) based on variables such as the time of day, and possibly other external factors. This note should clearly communicate that the ORO has established a position and incorporated this position into the PAR logic diagram.	ORO vs. licensee responsibility	Appendix	Agree. OROs may relieve the licensee of that responsibility. No change.
128	53	Our seventh comment is that The Illinois Emergency Management Agency has extensive technical capabilities that are used to develop protective action recommendations. The NRC has chosen to include guidance in this document that requires the utility to consider offsite impediments that were formally the jurisdiction of OROs and FEMA. The utilities recommendations should be based on an assessment of plant conditions and any impediments that may exist onsite. Offsite impediments and their effect on protective action recommendations remain the responsibility of the OROs. Requiring the utility to factor offsite impediments into their decision-making process has the potential to delay protective action recommendations to OROs and therefore should be removed from	ORO vs. licensee responsibility PAR Logic Diagram	Attachment Note 7	Agree. PAR logic should reflect ORO coordination. No change.
122	55		ORO vs. licensee responsibility		Agree. The ORO may relieve the licensee of that analysis. No change.

Comment #	ID	Comment	Keyword	Section/ Page	Adjudication
		the proposed guidance.			
127	48 57E48	It appears from the document that the NRC expects licensees to make precautionary PARs at SAE or Alert. Traditionally, the recommendation for precautionary actions has been within the purview of the OROs	ORO vs. licensee responsibility Precautionary protective actions	Section 2.3	Disagree. Supplement 3 does not require licensees to make PARs at an SAE. No change.
129	48 57E48	The document states that the PAR diagram is intended to be implemented without conferring with the ORO, however, some listed actions require conferring with the ORO prior to implementing the action. It is not likely that shift staff would be able to do this as they are busy trying to mitigate the accident and they only have 15 minutes to make a PAR after declaring an emergency.	ORO vs. licensee responsibility PAR Logic Diagram	Attachment	Disagree. Organizations should confer during planning, not during the response. No change.
130	48 57E48	Note 7 states that if the ERO is activated, the licensee should be able to confer with the ORO. It is implied that they should confer about the status of the evacuation but this is not stated explicitly. Please clarify.	ORO vs. licensee responsibility	Attachment Note 7	Disagree. Federal guidance need not specify the details of interaction between a mature ORO and licensee. These entities have been preparing together for many years and have established relationships for response. No change.
131	4857E48	Note 8 states that within 1 hour of the initial PAR for a hostile action event, the licensee should confer with the ORO regarding a change in PAR. This guidance places an undue burden on the licensee to keep track of when they need to discuss changing the PAR and should be eliminated. The document should be revised to state that it is the responsibility of the ORO to initiate these discussions. Reliance on Evacuation Time Estimates (ETEs): The 2010 Draft NUREG-0654, Supp. 3 document emphasizes the value of Evacuation Time Estimates (ETEs) in planning PAR strategies. In Section 3 of the document, ETEs are used to drive protective action decision making in rapidly progressing scenarios. BRP questions whether ETEs should be used in this way. Protective action decision making must be driven by plant conditions, anticipated or actual radiological releases, and road and weather conditions. Having to reference ETEs to decide on a protective action strategy will only cause evacuation delays and increase the risk of exposure to the public from radiological releases at the plant.	ORO vs. licensee responsibility PAR Logic Diagram	Attachment Note 8	Agree. The ORO may relieve the licensee of the timeframe requirement. No change.
140	16		PAR development		Disagree. The decision points for which ETE data are used are for the large early release and the timing of decisions to expand evacuation to additional areas. These criteria would be used in the implementing procedure and could be implemented rapidly without extensive review. No change.

Comment #	ID	Comment	Keyword	Section/ Page	Adjudication
141	25	<p>The draft Supplement 3 states that the PAR Logic Diagram "... is not intended to be used without site specific modification." It further states that the NRC's expectation is that the NPP develop PAR procedures that include ORO input and that this input will guide the criteria used in the PAR Logic Diagram. The current PAR Logic Diagram is adequate as is. This is particularly true as it applies to EPZ's with a smaller population and adequate road networks. Mandating the use of the PAR Logic Diagram attached in the draft Supp. 3 would require the NPP and ORO to again go through the extensive process of PAR review when the logic diagram currently used meets all of the requirements of 10 CFR 50 and the NRC's expectations of rapid notification. The current PAR determination process at Columbia Generating Station (CGS) includes a step in the Emergency Directors procedures that, if the PAR does not adequately address the current situation, they can contact the ORO to discuss a more appropriate PAR. It is recommended that the use of the PAR Logic Diagram specified in the draft Supplement 3 not be mandated if the current PAR Logic Diagram meets the requirements of 10CFR50, the NRC's 15-minute notification expectation, and the expectations of the ORO.</p> <p>REWRITE – Change to read as follows: "The NRC encourages the nuclear power plant licensees to develop PAR procedures and associated PAR Logic Diagrams that include ORO input at the various decision points identified in this guidance."</p>	<p>PAR development Workload/ resource burden</p>	Section 2	<p>Disagree. The protective action logic should be reviewed for improvement with the revised Supplement 3 in order to incorporate updated analysis. The existing Supplement 3 is based on old information. A given low-population site could possibly maintain current protective action logic, but that logic should be reviewed and updated, if appropriate, with the latest information available. No change.</p>
142	29	<p>As currently written, this sentence conflicts with the closing sentence in this paragraph which recognizes that in some rare cases the ORO may chose not to participate in the development of the site-specific Par logic diagrams. The rewrite brings the two sentences and section guidance together.</p> <p>REVISE & REWRITE: While the intent of this paragraph seems to be to have the individual sites develop a set of severe accident (General Emergency) PARs in conjunction with the OROs, the wording seems to ramble and is very confusing. The "bottom line" seems to be that "The NRC expectation as demonstrated by licensees in biennial evaluated exercises, is that licensees will include a PAR with the General Emergency notification. The 15 minute time requirement remains in effect regardless of differences I licensee PAR logic diagrams used b shift and by augmented ERO personnel. The PAR must be made rapidly, in accordance with approved procedures and those procedures should be developed in partnership with the responsible OROs." Statements like "The PAR logic diagram used by the licensee augmented ERO may differ reflecting the expectation that the augmented ERO has more resources than the shift organization." Raises questions as to who is providing the information to the ORO and what documentation is being used to create this information. This is ESPECIALLY important if this information was what was supposed to be created</p>	<p>PAR development ORO vs. licensee responsibility</p>	Section 2, sub-paragraph 3, page 5	<p>Disagree. The NRC must allow for the possibility of ORO noncooperation with a licensee. No change.</p>
153	29		<p>PAR development</p>	Section 2, sub-paragraph 1, page 5	<p>Agree. Change in wording.</p>

Comment #	ID	Comment	Keyword	Section/ Page	Adjudication
		in partnership with the ORO!			
132	32	<p>The draft of Supplement 3 encourages the licensee to get more input from offsite response organizations during the development of their Protective Action Recommendation (PAR) logic diagram. In general Ohio EMA supports this idea, but disagrees with the suggestion that weather and road conditions be factors considered by the licensee. Traditionally these considerations are the purview of the counties as they have the resources and knowledge of the area to quickly and accurately assess these conditions. To incorporate these factors into the licensee's PAR process may actually delay the PAR issuance process as they will have to seek out this information. The licensee should be focused on conditions within the plant and base their PARs on those conditions. Consideration of how that PAR may need to be modified due to offsite conditions should be left in the hands of county when drafting their Protective Action Decision (PAD).</p> <p>Will guidance be provided on the logistics of the collaboration between the licensee and offsite response organizations in developing the PAR logic diagram? For instance how is the collaborative process expected to be documented and how long must the documentation be maintained? How often will the PAR logic diagram have to be reviewed (e.g. annually, after a license amendment)? Additionally, how will this process be managed in areas with multiple jurisdictions? If offsite agencies fall under the jurisdiction of different FEMA Regions, which Region will be responsible for evaluating the PAR logic diagram agreements? Will each FEMA Region be evaluating the agreements to a set standard that is applied consistently throughout the country? If the licensee and offsite response organizations cannot reach consensus on the PAR logic diagram how is the conflict resolved?</p>	<p>PAR development</p> <p>ORO vs. licensee responsibility</p> <p>Precautionary protective actions</p>	Attachment	<p>Agree. The ORO can relieve the licensee of this responsibility. No change.</p>
133	32		<p>PAR development</p> <p>Coordination—FEMA/ NRC/State</p> <p>ORO vs. licensee responsibility</p>		<p>Disagree. No further guidance will be developed for coordination between the licensee and ORO. It is assumed that these mature organizations can coordinate without Federal guidance even where multiple jurisdictions exist. No change.</p>

Comment #	ID	Comment	Keyword	Section/ Page	Adjudication
154	37	<p>While PAR planning discussions between licensees and OROs may achieve general consensus on changes to the site-specific PAR framework, the final decision-making authority during actual emergency conditions must rest with OROs. Therefore, the development of site-specific PAR logic diagrams must contain a caveat that OROs will have additional information (e.g., evacuation impediments status) that may warrant deviations from licensee recommendations. The basic message throughout the proposed Supplement 3 should reflect the view that the primary licensee responsibility is to focus on the science of the plant emergency conditions, and the ORO(s) to focus on offsite control of the emergency response, including impediments.</p> <p>Rationale: The licensee version of the PAR logic diagram cannot and should not encompass all possible offsite conditions that may exist during an actual emergency. By regulation, OROs retain the final authority for protective action decision making.</p>	PAR development	Attachment Notes 2, 4, 7, 8, 9, 10, and 11	Disagree. OROs may deviate from PARs at any time; there is no intention to usurp ORO authority and no indication that licensees are responsible for ORO decisions. No change.
139	38	<p>“Planning is in place to evacuate 100 percent of the public; however, protective action recommendations and decisions should be based on the 90 percent ETE values” – does this require two sets of ETE study based on 90 percent of population and 100 percent of population maybe after 2010 Census study is completed?</p> <p>Also later on this document on Section 4. Radiological Assessment Based PAR, it states “it would be inappropriate for licensees to expand PARs based only changes in wind direction” – based on these two statements licensees should do wind persistence analysis to see if they have to evacuate more than three downwind sectors in case of wind shift at the declaration of the General Emergency; however they should not expand PAR based on wind shift alone?</p>	PAR development 2010 Census/ ETE guidance	Section 3, page 9	Agree. Implementation will await the enhanced ETEs. No change.
143	38	<p>“Although verification of dose projection data is desirable, PAR should not be delayed unduly while waiting field monitoring data or sample analysis” – in case of wind shift, do licensees have to do dose projection based on effluent monitor data before expand PAR but still have 15 minutes to notify OROs from the time wind shift is known? Also verification of dose projection data is not going to be available in 15 minutes of window of making notification with PAR, most cases licensees will do PAR without the verification of the dose projection data.</p>	PAR development	Section 2.4, page 7	Agree. The initial PAR may involve additional sectors if the wind variability indicates the need, as determined during strategy development. However, expansion of PARs should include radiological assessment as well as plant status (e.g., significant source term in containment and lack of mitigation). No change.
144	38	<p>NRC does not recommend automatic precautionary protective actions; however, without the written plan no precautionary protective action will be executed. Also depend on how severe it is different precautionary protective action should be considered. In order to meet this guidance, will have to have another PAR Logic Diagram for Site Area Emergency. This recommendation affects more for OROs than Licensees.</p>	PAR development	Section 4, page 11	Disagree. If a release is ongoing, the licensee will be calculating doses. If a wind shift occurs, the licensee should assess dose and make a PAR for those areas where the protective action guideline (PAG) could be exceeded. No change.
152	38		PAR development ORO vs. licensee responsibility	Section 2.3, page 7	Disagree. Another logic diagram is not necessary; instead, the staff simply suggests that OROs pause and talk to the licensee before implementing precautionary protective actions at an SAE based on past experience. However, OROs determine which PAD is most protective of the public. No change.

Comment #	ID	Comment	Keyword	Section/ Page	Adjudication
145	43	Paragraph 3 - Determination of PAR for Rapidly Progressing Scenarios should also incorporate evening and off-work hour valuations. Last paragraph – Modify last sentence to read: Impacted jurisdictions and the Licensee shall perform a site-specific analysis to determine if other criteria are more appropriate. Impediments include the Following: OROs are ultimately accountable and responsible for determining protective action decisions. Licensees are not responsible for soliciting information necessary for the recommendations or decisions. The licensee may offer recommendations based on plant status. However, the OROs with their executive leadership are ultimately accountable to and responsible for implementing protective action decisions.	PAR development		Disagree. The guidance suggested is site specific and protective of public health and safety. The PAR logic must not become so complicated that it cannot be rapidly implemented. However, OROs may perform additional analyses to support PADs as they see fit. No change.
155	43	The proposed NUREG presents proposed actions based on studies but does not provide quantifiable values for the exposure advantages and disadvantages under the combinations of conditions that would likely exist. For the decisions to be most effectively derived, STARS requests that the document quantify the benefits of one approach over another. Providing this data will allow the OROs to make a better informed decision of the exposure benefits of one PAR strategy over another.- In the absence of that information, will the licensees or OROs be expected to provide supporting sensitivity studies to support the decisions based on dose avoidance?	PAR development	Attachment Note 2	Agree. The ORO may relieve the licensee of this determination. No change. Disagree. The logic of Supplement 3 is an evolutionary improvement in PAR. There is no quantitative site-specific analysis, but in general, the PAR Study showed that staged evacuation reduces risk to those most at risk. Additionally, the Supplement 3 logic reduces the burden on OROs for initial protective action, facilitates more rapid decisionmaking, addresses LER more directly, and recognizes that the accident may be mitigated. Further, the guidance incorporates SIP more fully and involves ORO participation in selection of decision criteria in advance. These are some of the benefits of the revised Supplement 3. No change.
138	53	Page 76 has an interesting conclusion, "Although 4 hours was identified in this study of a uniformly distributed population, many sites have small populations within 8.0km (5miles) of the site, thus a site specific analysis would be necessary." In Illinois this is the case which means the new PAR study really cannot be used as written. Monroe County Assessment: The proposed Supplement 3 blurs [sic] the respective roles of the licensee and offsite response organizations (OROs) by requiring the licensee to assess offsite conditions for impediments before making a protective Action Recommendation (PAR) at a General Emergency. Monroe County strongly disagrees with this approach. The assessment of offsite conditions is a long-established responsibility of OROs, and Monroe County firmly believes licensee recommendations should be based upon the science of known onsite conditions including the status of the plant and radiological releases. In our role as proactive action decision maker, only the ORO has authority and resources to evaluate offsite conditions. In addition, we are concerned that any requirement that compels the licensee to assess offsite conditions	PAR development	Page 76	Disagree. The 4 hours identified in the PAR Study for a hypothetical site was mentioned only to provide perspective. The nature of the accident cannot be predicted with sufficient accuracy to provide specific guidance. Within the first few hours of an emergency response, sufficient radiological expertise will be available to allow a site- and accident-specific assessment to determine when it is safest to evacuate the SIP population. However, the reference to 4 hours will be removed. Change wording.
135	57		PAR development ORO vs. licensee responsibility		Agree. The ORO can relieve the licensee of that responsibility. No change.

Comment #	ID	Comment	Keyword	Section/ Page	Adjudication
		<p>will delay the timeliness of licensee PARs and adversely impact the subsequent ORO implementation of protective action decisions. Monroe County Position: We urge the NRC to remove the language in Supplement 3 requiring the licensee to assess impediments before making a PAR.</p>			
136	59	<p>The document suggests that licensees and Offsite Response Organizations (OROs) discuss and agree to the Protective Action Recommendation (PAR) logic diagram and further develop site-specific Protective Action (PA) logic diagrams. While this appears plausible in theory, this concept presents challenges for entities with multiple commercial nuclear power plants and plume exposure pathway emergency planning zones that affect multiple states. Currently Pennsylvania is the home of five nuclear power plant sites. Two of the Pennsylvania Nuclear Power Plants have approximate ten-mile radius Plume Exposure Pathway Emergency Planning Zones that impact multiple states. The Plume EPZ of the Peach Bottom Atomic Power Station located in southern York County Pennsylvania affects portions of three counties in the Commonwealth of Pennsylvania and portions of two counties in the State of Maryland. The Plume Exposure Pathway of the Beaver Valley Power Station located in Beaver County Pennsylvania has an approximate ten-mile radius Plume Exposure Pathway Emergency Planning Zone that affects portions of three counties; however, the Plume EPZ includes one county in each of the Commonwealth of Pennsylvania, the State of Ohio and the State of West Virginia. It is important to note that all of these entities have differing roles and responsibilities with respect to legal decision-making regarding the health and welfare of the general public. While all of the five nuclear power plant sites have the ability to recommend various Protective Actions including combinations of sheltering and evacuation based upon plant conditions, meteorological conditions and plume modeling, having the OROs agree in advance to pre-event Protective Actions is not an easily achieved task. In terms of the nuclear power plants with Plume EPZs affecting multiple states and counties, the decision making process requires input from the elected County Commissioners, the Health Departments, State Radiation Control Agencies, and other elements of the State and Commonwealth governments including the Governor(s) or Senior State Official(s). Within Pennsylvania, at least one additional factor is the experience gained during the actual 1979 Three Mile Island Unit 2 reactor event and the resultant Commonwealth policy regarding protective actions. Due to the TMI Unit 2 event,</p>	PAR development		<p>Disagree. The ORO responsible for protective actions should be engaged in the development of those few criteria identified in the Supplement 3 PAR Logic Diagram. Pennsylvania is the only State to implement the all or none protective action. This action increases risk to the public by delaying the evacuation of those closest to the plant and putting those who are not at risk into an unnecessarily large evacuation. This practice also unnecessarily strains local resources for managing the evacuation and would increase dose in the case of an early release. The immediate evacuation of the small, close-in population around the plant is more protective. An expanded evacuation can follow, as deemed necessary by OROs. No change.</p>

Comment #	ID	Comment	Keyword	Section/ Page	Adjudication
		<p>Pennsylvania has developed an "all or none" protective action policy to either shelter or evacuate the entire 360 degree, 10-mile radius Plume Exposure Pathway EPZ. This was a decision made by the Commonwealth following the myriad of hearings and investigations into the TMI Unit-2 accident and prior to the restart of TMI-Unit-1. Since that time, the approximate thirty years of public information dissemination to more than a half million residents of the five Commonwealth of Pennsylvania Plume Exposure Pathway Emergency Planning Zones along with the training and full-scale exercises involving thousands of ORO personnel have been based upon the protective action policy of the entire designated plume exposure pathway emergency planning zone. That is, either shelter or evacuate the entire EPZ upon the recommendation or order of the Senior State Official. Pennsylvania law indicates that the Governor is the only official who may compel an evacuation.</p>			
137	59	<p>The Pennsylvania Emergency Management Agency receives input from a number of Subject Matter Experts (SMEs) during the Protective Action Decision Making Process. The SMEs include the Pennsylvania Bureau of Radiation Protection, the Pennsylvania State Police, The Pennsylvania Department of Transportation, The Pennsylvania Department of Health, The Pennsylvania Department of Public Welfare, The Pennsylvania Department of Military and Veterans Affairs, The Pennsylvania Department of Education and others. A change to the current Protective Action Decision Process will require more than an agreement between the licensees and the OROs in terms of Protective Action Logic diagrams to effectuate a change of policy.</p>	PAR development		Agree. No change.
134	48 57E48	<p>The document states that "when radiological assessment shows an ongoing release or containment source term is not sufficient to cause exposures in excess of EPA protective action guidelines, it would be inappropriate for licensees to expand PARs based only on changes in wind direction." EPA-400 states that for emergencies with the potential for offsite consequences immediate evacuation or sheltering of designated populations should occur without waiting for release rate information or environmental measurements. By definition, at a GE, releases can be reasonably expected to exceed EPA PAGs off site for more than the immediate site area. Standard protective actions for a GE are to evacuate (or shelter in place) the area [sic] two miles around and 5 miles downwind of the plant. Although the guidance states that it would be inappropriate for licensees to expand PARs based only on changes in wind direction, OROs would likely expect that the licensee would recommend protective actions for additional sectors in the new downwind direction, as this would be consistent with other guidance. Since it appears that one purpose of this revision to Supplement 3 is to encourage agreement between licensees and OROs on appropriate protective actions, it should not include an action that is contrary to</p>	PAR development	Section 4	Disagree. The expansion of protective action when not justified by plant or radiological conditions is inappropriate, regardless of local decisions. No change.

Comment #	ID	Comment	Keyword	Section/ Page	Adjudication
		what OROs would likely expect to happen. Please revise the document to remove this section.			
146	48 57E48	The document states that "The ACRS... recommended against making PAR strategies overly complicated, such that they slow down decision-making during emergencies." However concepts presented in this document appear to complicate PAR decision-making not simplify it. Part of the reason for developing EALs was to standardize response actions for emergencies with similar expected consequences. An ORO response to an ALERT or SAE is the same regardless of what plant conditions initiated the emergency declaration. The document discusses "severe accidents" and "general emergencies" and states that they are not synonymous. This implies that protective action recommendations and ORO actions for a severe accident should be different from those for a general emergency. This essentially adds a fifth category to the EAL scheme which is not defined in any plant's or ORO's emergency procedures. Please clarify the difference between a severe accident and a general emergency. The need for a fifth EAL should be determined through an industry-wide review of EAL bases	PAR development	Section 1	Disagree. As shown in public meetings, the guidance is much less complicated when the site-specific criteria are incorporated. No change.
147	48 57E48		PAR development	Section 2.1	Agree. This is addressed by the "rapidly progressing severe accident" side of the logic flowchart. While these events are very unlikely, they are included in the EP planning basis and must be accounted for. No change.
148	48 57E48	This entire section needs to be expanded and explained. Additional guidance is needed on when and how to do the wind persistence study as described in the document.	PAR development	Section 2.4	Disagree. The guidance is permissive, not directive. The site need not undertake this element. No change.
149	48 57E48	Wind persistence varies with time of day and time of year. Does NRC expect that licensees will have multiple protective action strategies based on wind persistence data for various times of day/year?	PAR development	Section 2.4	Disagree. This could be acceptable, but may complicate the PAR logic to the point that it cannot be rapidly implemented, negating any benefit from the additional consideration. No change.
150	48 57E48	The document states "A rapidly progressing event, in this context, is defined as a scenario in which a large radioactive release may occur in less than 1 hour." Less than 1 hour after what? Please clarify.	PAR development	Section 3	Agree. "After declaration of GE" will be inserted. Change in wording.

Comment #	ID	Comment	Keyword	Section/ Page	Adjudication
156	48 57E48	<p>The document states that "... protective actions should not be terminated by OROs until fully discussed among responsible State and local officials, with the licensee supplying input regarding plant status. The PAR logic diagram recognizes this path and provides decision points for protective actions, based on the current plant status." The PAR logic diagram has decision points to increase protective actions, but there does not appear to be any decision points for relaxing protective actions. Please clarify.</p> <p>Note 8 states that the licensee should revise the PAR for an evacuation support impediment at a predetermined time. This guidance places an undue burden on the licensee to keep track of when they need to revise the PAR and should be eliminated. The licensee should make the PAR based on plant conditions, as if an evacuation support impediment did not exist. The document should be revised to state that it is the responsibility of the ORO to revise the PAD when evacuation support is in place.</p>	PAR development	Section 2.2	Disagree. Relaxing the PAD is the purview of the ORO. Supplement 3 is not the vehicle for such guidance if it is necessary at all. No change.
157	48 57E48	<p>Complexity of the PAR Logic Diagram: The Advisory Committee on Reactor Safeguards in its review of NUREG/CR-6953 (the PAR Study) recommended against making PAR strategies overly complicated, such that they slow down decision making during emergencies. It appears that the authors of the 2010 Draft NUREG-0654, Supp. 3 document ignored this important recommendation. The document is overly complicated and, if implemented, could slow down protective action decision making during emergencies. It should be pointed out that severe reactor accidents are very infrequent events. Since Oyster Creek, the first large-scale commercial nuclear power plant in the United States to become operational in 1969, there has only been one severe reactor accident at a US commercial reactor requiring extensive offsite protective actions, namely the 1979 TMI-2 accident. Common sense calls for simplicity in analysis and an abundance of caution in responding to these events. BRP believes that protective action decision making must be clear and straightforward in its presentation. The 2010 Draft NUREG-0654, Supp. 3 document adds complexity and requires intricate analysis and finely nuanced decision making in situations where clear, straightforward direction is needed. The PAR Logic Diagram in this document is excessively complex, and nearly every box in it refers to a footnote, the sum of which comprises three additional pages. It relies on multiple decision points, requiring decision makers to repeatedly reevaluate information and reassess their decisions. There are two problems associated with this approach. First, following an initial protective action decision, failure to recognize and act on a newly emerging threat to the public could result in additional or unacceptable radiation doses to people who are sheltered-in-place, even after an initial evacuation of some areas is successfully executed. Secondly, issuing a stream of new or updated protective action decisions to the public could cause the public to question the credibility of the government officials making</p>	PAR development	Attachment Note 8	Agree. The ORO may relieve the licensee of that burden. No change.
161	16		PAR Logic Diagram NUREG/ CR-6953 Vol. I, II, and/or III ORO vs. licensee responsibility	Attachment	Disagree on many points. The staff agrees strongly that immediate protective action is appropriate in a GE. As shown in public meetings, the PAR logic is much simpler when the site-specific elements are included. Supplement 3 provides for an immediate action that is protective of public health and safety and will rapidly move those at most risk. The Pennsylvania practice of 10-mile evacuations puts those closest to the plant at higher risk while providing no benefit to those further away. Any delay of evacuation for the purpose of traffic control to support a larger evacuation only increases risk to the public. The Three Mile Island accident was a serious event that warranted strong corrective action on many fronts. There was nothing in the accident progression that would support the need for evacuation to 10 miles in all directions. The 2-mile ring is used only to communicate that all emergency response planning areas that touch the 2-mile ring should be evacuated initially. This will likely result in a more extensive evacuation involving more people than those within 2 miles of the plant. No change.

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		<p>those recommendations. If the recommendations are changing from hour to hour, how much confidence can one place in those recommendations? BRP is also concerned about the 2010 Draft NUREG-0654, Supp. 3 recommendation that the Offsite Response Organizations (OROs) participate in the development of the licensee's PAR logic diagram. BRP believes that few OROs have the technical background to effectively evaluate licensee PAR logic diagrams, and that involvement of OROs in this process would create an unwarranted supposition that OROs involved in the process evaluated and approved a licensee's PAR logic diagram. In BRP's view, the 2010 Draft NUREG-0654, Supp. 3 misses the basic point that for a severe reactor accident requiring offsite protective actions, the most effective protective action is to MOVE THE POPULATION AWAY FROM THE PLANT AS QUICKLY AS POSSIBLE. The case for this approach was made convincingly in the 1996 NUREG- 0654, Supp. 3 document. The 2010 revised document, with its emphasis on sheltering in- place and staged evacuation, dilutes and undermines the 1996 guidance, and would detract from an effective protective action response to a severe nuclear power plant accident.</p> <p>REVISE</p>			
160	29	<p>As shown the PAR Logic diagram is both incomplete and cumbersome. The logic flow leads to a condition box, "Continue Assessment (11)" (#1), that essentially puts the site in a circular motion with no guidance on what action should be taken next. Recommend that a control line (#2) be drawn to connect the box with the box labeled "Continue assessment, maintains PAR" (#3). This condition box should lead to a Decision Point to help determine if and/or when the assessment allows the implementation of the condition indicated at #4 or go to some additional condition box.</p> <p>Our preliminary review of the proposed Protective Action Recommendation Logic Diagram indicates that the standard format and content will require substantial revision to be meaningful to licensee and ORO users. For example, the entire section from the "Do impediments to evacuation exist?" decision diamond and all boxes to the right (the "yes" path) would be deferred to OROs. Only OROs will have access to meaningful, current information on the status of impediments, whether the impediments are emerging or clearing. In addition, there is not enough guidance for licensee shift personnel to determine that the decision diamond "Rapidly progressing severe accident?" is a "yes". Therefore, it is entirely likely that the final, agreed upon site-specific logic diagram could reduce down to the center part of the proposed logic diagram. The Supplement 3 wording in Section 2 should clearly state that site-specific PAR schemes are fully acceptable in a greatly simplified format as long as they have a sound technical basis and are agreeable to OROs. Rationale: The development of site specific PAR</p>	PAR Logic Diagram	Attachment	Disagree. The current system ends with "continue assessment." Assessment continues until the emergency is terminated. No change.
166	37		PAR Logic Diagram	Section 2, page 5, Attachment	Disagree. OROs can relieve licensees of the impediment element. The guidance on the rapid release is provided. The PAR for the rapidly progressing scenario is more extensive because of the severity of the accident. No change.

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		<p>methodology should allow any "logic diagram" format and content that is meaningful and useful to licensee and ORO personnel, even if it departs substantially from the NRC version proposed in draft Supplement 3.</p>			
		<p>The proposed model PAR Flow diagram is complex and cumbersome with its numerous supporting notes, etc. The licensee, in particular operational shift personnel will have difficulty implementing this guidance in a timely and accurate manner unless the flow charts are significantly simplified. Supplement 3 implies the potential need to develop three PAR Flow Diagrams - one for licensee operational shift personnel, one for the augmented licensee ERO and one for OROs for protective action decision making. The ACRS recommended against making PAR strategies overly complicated, such that they slow down decision making during emergencies.</p>	<p>PAR Logic Diagram Workload/ resource burden</p>	<p>Section 1, Section 2, page 5</p>	<p>Disagree. As shown in public meetings, the logic diagram is simplified when site- specific elements are incorporated. No change.</p>
167	37	<p>Rationale: The added complexity of the proposed PAR logic diagrams may contribute to confusion and delay in issuing timely and effective protective actions.</p> <p>Note 1 of the model PAR Logic Diagram defines a rapidly progressing severe accident as a General Emergency (GE) with rapid loss of containment integrity and loss of ability to cool the core, and furthermore requires a determination under these conditions that a radiological release is expected in less than 1 hour. Draft Supplement 3 correctly states that this condition is very unlikely, but at the same time, the licensee is still required to make a PAR involving the potential, immediate evacuation of nearby populations within 15 minutes of declaring the GE. It will be very difficult to properly diagnose a rapidly progressing severe accident, which could lead to a delay in meeting the 15-minute PAR requirement. Many, if not most licensees will likely default to the "No" path if this scenario cannot be readily determined (as is allowed in the note), and will follow the PAR logic down the center of the PAR Logic Diagram. Many OROs are uncomfortable with consenting to an immediate evacuation under rapidly progressing accident without major supporting elements being in place (for assessment of impediments and traffic control). Even with improved messaging to the public, ORO emergency managers believe that prompt evacuation may lead to chaotic conditions and confusion of the public if the OROs are not yet operational. They also believe that prompt, uncontrolled evacuations could present a greater burden on ORO resources to regain control of the emergency response. The draft Supplement 3 should state this concern and make the "rapidly progressing severe accident "Yes" logic path entirely optional.</p>	<p>PAR Logic Diagram</p>	<p>Attachment Notes 1, 4, 5, 9, and 10</p>	<p>Agree. Licensees may default to the "no path" in the face of uncertainty. The impediments note addresses the concern of OROs described in the comment and may be incorporated into the strategy if OROs agree. Additionally, an important element of staged evacuation is to move those closest to the plant while allowing time for activation of ORO response with minimal support needed. No change.</p>
168	37		<p>PAR Logic Diagram</p>		

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169	37	"The NRC expects that NPP licensees will develop PAR procedures that include ORO input at various decision point... and that this input will guide the criteria used in the PAR logic diagram." Have any NPPs utilized ORO input to develop their PAR logic diagram?	PAR Logic Diagram	Section 2, page 5	Agree. Entergy in Louisiana performed pilot development. No change.
170	37	Developing site-specific elements and criteria for the PAR Logic Diagram would require change of the plan or site-specific elements and criteria will be based on the existing plan?	PAR Logic Diagram	Section 2.1, page 5	Agree. Plan change may be required. No change.
171	44	The logic diagram has a branch which says, "GE conditions remain?" with the answer "No," which goes to a box that says, "Expand PAR only to areas where PAGs could be exceeded." By the approved generic Emergency Action Level schemes, if PAGs could be exceeded at or beyond the Site Boundary, the plant should be in a General Emergency. This branch should be removed.	PAR Logic Diagram		Disagree. Radiological conditions could hypothetically require expansion of the PAR (e.g., because of field monitoring data, ground shine, or other considerations). Assessment at the time would be appropriate. The GE conditions may no longer exist, but the declaration will not have been terminated, and hence the GE is still active. However, the guidance has been clarified to address this comment. Change wording.
162	50	Utilities should focus on assessing the potential for, or actual release of radiation from the facility. Whether or not the evacuation support is in place or if impediments to evacuation exist, should not be a utility concern. That is an ORO responsibility for all emergencies, including radiological events. It is impractical, if not impossible to provide evacuation impediments to the utility in a timely manner that would benefit the PAR decision making process. This process should be removed from the PAR Logic Diagram.	PAR Logic Diagram ORO vs. licensee responsibility	Attachment Note 2, Note 8	Agree. The ORO may relieve the licensee of these considerations. However, the licensee will know the timing of the GE declaration and whether the event is a hostile action. Assessing these impediments takes almost no time from the PAR logic process. No change.
163	53	The implementation guidance needs to address the PAR logic diagram's dependence on state and local ORO input. The guidance needs to address what happens if the ORO decision makers "change their mind" regarding their philosophy? Will this require the utility to comply with the change and over what time frame? This issue could potentially cause the licensee and the local OROs to expend a significant amount of resources for reasons outside of their control.	PAR Logic Diagram ORO vs. licensee responsibility Workload/resource burden	Attachment	Agree. Change in wording.
164	53	At the July 21, 2010 public meeting in Tampa, Florida, FEMA and NRC indicated that they would inspect to see if the final PAR logic diagram "makes sense." This is a highly subjective criteria. This inspection criteria should be defined and made available to the licensees during the implementation phase. -Building on the above, if the state and local OROs have opinions, desires, or demands that do not "make sense," what is the liability for the utility? Are there options for redress defined in this process? -If the state and local OROs categorically reject the large early release or deem it so improbable or impractical that they do not desire the "left side" of the logic diagram, what is the expectation for the utility?	PAR Logic Diagram Regulatory significance	Attachment	Agree. Change in wording.

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165	53	<p>On multiple occasions during the July 21, 2010 public meeting in Tampa, Florida, the NRC Staff indicated that they wanted a basis document for the state and local ORO decisions / input into the PAR logic diagram. The implementation guidance should define the expectations for the content of this document, its maintenance and retention as a record, the process and criteria for reporting changes made to the document, and the process for controlling changes made to the document.</p> <p>- The implementation guidance should also establish the expectations for the revalidation of continued philosophy as key state and local ORO decision makers change. As key ORO decision makers change, is there an expectation that they have the opportunity to modify the prior decisions?</p> <p>With regard to the PAR logic diagram the left hand of the chart could be greatly simplified for low population EPZs. In other words instead of complicating the chart for most, would it not have been easier to add notes to those high population EPZs and leave evacuation as the preferred option for most?</p>	PAR Logic Diagram	Attachment	Agree. The expectation is that the PAR strategy will be developed with ORO input. The strategy is not expected to change unless there is a significant change in the site ETE. Change in wording.
178	55	<p>There seems to be an undue emphasis placed on the rapidly progressing severe accident given its uncertainty of existence to the point it is deemed non credible. Our dispute is not with the Emergency Planning Basis itself as that is established in the current Emergency Planning Regulations, although studies such as SOARCA once reviewed and properly analyzed may necessitate the revision of the Emergency Planning Basis. Our dispute is with the need to focus most of the effort on the Supplement 3 PAR Logic diagram on the rapidly progressing severe accident and all of the effort in Volume 3 of NUREG/CR-6953 on the rapidly progressing severe accident. What should be done is to focus on a spectrum of accidents that are severe but credible as well as General Emergencies that are not severe accidents.</p>	PAR Logic Diagram	Attachment	Disagree. OROs should await the enhanced ETEs required by the rule change and then work through Supplement 3 to determine the appropriate protective action strategy. No change.
179	55	<p>Our recommendation is to simplify the PAR chart as follows: -The initial recommendation would be evacuate a 2 mile radius, shelter downwind to 5 miles unless there are impediments to evacuation. The next step would be to evacuate those areas where impediments are cleared and expand evacuation to cover areas where PAGs are exceeded or dose projections indicate PAGs will be exceeded. As far as the rapidly progressing severe accident is concerned it may be left the way it is.</p>	PAR Logic Diagram		Disagree. The LER is very unlikely, but remains in the EP planning basis and must be included in response plans unless the Commission changes the policy. No change.
180	55		PAR Logic Diagram	Attachment	Disagree. Although the comment does suggest a reasonable simplification, many areas of enhancement would be lost (e.g., OROs have stated their position that licensees provide PARs that reflect their expectations for hostile action or immediate GE). No change.

Comment #	ID	Comment	Keyword	Section/ Page	Adjudication
181	55	In section 2 of the Implementation of Guidance the statement is made "The Attachment is intended to guide the development of a PAR procedure." Also in section 2 it states that "The notes included with the PAR logic diagram provide direction for developing site-specific elements and criteria." It appears that the inclusion of the PAR logic diagram is not so much a PAR diagram as it is a repository of questions to develop a PAR logic diagram. It may be more appropriate to go back to the original format used in the NRC's 2008 presentation at the National REP Conference on slide 15 and define the impediments in a question and answer format. The answers to these questions would then be used to develop a site specific diagram.	PAR Logic Diagram	Section 2	Agree in part. The staff will clarify the notes and provide background information where appropriate. Change in wording.
182	55	The ORO and the respective utility should be able to modify the PAR chart in Supplement 3, based on sound technical analysis. An example of this would be to eliminate the left-hand side of the PAR chart based on an analysis of plant specific PRA results and evacuation time estimates and consequence analysis.	PAR Logic Diagram	Attachment	Disagree. EP is a defense-in-depth measure that is not based on the plant probabilistic risk assessment (PRA). The LER remains in the EP planning basis. No change.
159	11 38E11	During each of the two public forums that I attended, several very site specific concerns were raised that demonstrated some decision making gaps in applying the proposed logic diagram. Many of the site specific examples that have been brought to my attention were raised due to concerns over applying Evacuation Time Estimates (ETE) to the logic. Realizing that there may be many more very site specific issues across NRC Regions and understanding that each site may need to take exceptions to the guidance based on site specific issues, it might be appropriate to gather additional stakeholder input through public meetings within each Region.	PAR Logic Diagram	Attachment	Disagree. Stakeholder input is quite useful, and four public meetings were conducted and over 350 comments received. While more input could be useful, the NRC believes that adequate opportunity for input has been afforded. However, implementation meetings will be conducted. No change.
158	48 57E48	The PAR study used a hypothetical site with generic weather and a 10-mile EPZ population of 80,000 (100 residents per square kilometer). While we recognize that certain EPZ population assumptions are needed in order to do the analysis, NRC should recognize that this hypothetical site does not actually represent any particular site and that differences in total population, population density and population distribution may render the conclusions on relative efficacy of different PAR strategies inapplicable to any nuclear power plant site.	PAR Logic Diagram	Section 1	Agree. Site-specific elements will be incorporated into the PAR logic through the enhanced ETE. No change.
172	48 57E48	The document states that attachment PAR Logic Diagram is intended to be modified to be used by shift personnel prior to augmented ERO being ready. However, the diagram has several blocks for decisions to be made several hours after declaration of GE when shift personnel would no longer be making those decisions.	PAR Logic Diagram	Section 2	Agree. However, this is a contingency. It would be expected that the ERO would have been augmented by then. No change.
173	48 57E48	The document states "The PAR logic diagram in this guidance reflects this probabilistic perspective in a qualitative manner, while requiring escalated protective actions, when appropriate." This statement is confusing. Please clarify.	PAR Logic Diagram Editorial/ Verbiage	Section 2.1	Agree. Change in wording.

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174	48 57E48	The document states that "the PAR diagram provides a decision point for increase of protective actions after initial protective actions." This decision point is based on whether it is "safer to do so," but this term is not defined. One would assume that "safer to do so" occurs at the point where the dose to a member of the public from remaining sheltered would exceed the dose to a member of the public who proceeded to evacuate. This is a complicated analysis that requires numerous assumptions to calculate. Guidance on performing this "safer to do so" assessment should be included in the document.	PAR Logic Diagram	Section 2.1	Agree. The guidance cannot foresee the actual radiological conditions at the time of this very unlikely accident scenario. The hypothetical analyses indicated that at least 4 hours of SIP would be needed to reduce dose. However, the licensee and ORO would have to decide on the best course of action at the time. Hence, the term "safer" is used. No change.
175	48 57E48	The document states that "The PAR diagram recognizes that it may be sometime before GE can be terminated and provides decision point for expanding protective actions based on plant status." This decision point is based on whether or not GE conditions remain. The notes accompanying this decision box talk about the plant condition that triggered the GE declaration and whether or not there is a containment source term that exceeds the GE EAL. Usually, if you are at the point where a GE should be declared, there are multiple plant conditions that could be the triggering factor, so even if the condition that the GE was declared on no longer exists, there could still be other conditions that warrant a GE declaration. In addition, there is not a GE EAL basis that specifically includes containment source term. Please clarify.	PAR Logic Diagram	Section 2.1	Agree. Change in wording.
176	48 57E48	For completeness the PAR logic diagram should be revised to include an arrow between the box that says "Expand PAR only to areas where P AGs could be exceeded" and "Continue assessment."	PAR Logic Diagram	Attachment	Agree. Change in wording.
177	48 57E48	For accidents other than a rapidly progressing severe accident, the PAR logic diagram has an evacuation impediment decision box. This decision is not included in the rapidly progressing severe accident path. Please explain why an evaluation of evacuation impediments is not needed for a rapidly progressing severe accident. There are too many notes requiring reference during use of this Diagram. A Decision making Diagram should be as simple and easy to follow as possible. Every step of this diagram requires the reference to one or more notes for clarification of the step or decision point. Many of the notes have multiple parts which are applicable only when the specific condition exist i.e. hostile action.	PAR Logic Diagram	Attachment	Agree. Detail was added to the note. Given the urgency, and the likelihood of SIP anyway, the staff thought it best not to add decision blocks to the diagram. Change in wording.
183	29	DELETE This note is superfluous based on federal guidance that states any portion of a sector that falls with the "key-hole" is to be evacuated.	PAR Logic Diagram	Attachment	Agree. Some information in notes will be moved to background information. Change in wording.
184	29	REVISE/ REWORD As written, this note is directing calculations to be made during the determination of an ECL & PAR, there by adding additional time & stress to the control room staff.	PAR Logic Diagram	Attachment Note 4	Disagree. Information is included to ensure that the guidance is complete. No change.
185	29		Workload/ resource burden	Attachment Note 7	Disagree. All calculations are to be made during planning, not at the time of the emergency. No change.

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186	29	REVISE/REWORD Without conferring with the OROs, this decision point defaults to NO. The ERO should ALWAYS confer with the off-site agencies to determine if evacuation impediments exist. It is highly possible that impediment to a timely evacuation may arise after the evacuation has been recommended and initiated, i.e. traffic accidents.	PAR Logic Diagram ORO vs. licensee responsibility	Attachment Note 8	Disagree. The shift staff does not have the time or resources to confer. Note that the ORO may relieve the licensee of responsibility for impediments. No change.
187	29	DELETE Movement of citizens "through potentially contaminated areas" is once again counter to one of the basic concepts of Emergency Managements which is to "NOT put citizens or responders in a more hazardous situation that they are in currently." Actions such as this MUST be considered VERY carefully and with ALL CURRENT situation information available to the decision makers.	PAR Logic Diagram Staged evacuation	Attachment Note 10	Agree. This action would not be performed unless necessary. However, in an LER, SIP followed by evacuation through contaminated areas may save dose over immediate evacuation into a plume or delaying evacuation longer than necessary. No change.
188	37	In the last box in the bottom left-hand corner of the PAR Logic Diagram, the meaning of "When safer to do so, begin staged evacuation of all affected areas" is not adequately explained by Note 10. The note states that shelter-in-place times in excess of 4 hours reduce dose, and that dose is not reduced in less than 4 hours. This appears contrary to the reduced effectiveness of sheltering protection over time that is shown in the PAR Study, Volume I. If the note statement is assuming that a concurrent release would make premature staged evacuation (less than 4 hours) following sheltering- in- place undesirable from a dose perspective, then the statement should be clarified. The statement "when safer to do so" is also unclear. Does it mean that offsite exposure rates have significantly decreased at that time, or is it referring to a PAG that would prompt a staged evacuation? Furthermore, the term "all affected areas" is vague, and should instead say "all affected areas where a PAG is reached or exceeded". The language in the note should be clarified.	PAR Logic Diagram Shelter in place	Attachment Note 10	Agree. The guidance cannot foresee the actual radiological conditions at the time of this very unlikely accident scenario. The hypothetical analyses indicated that at least 4 hours SIP would be needed to reduce dose. However, the licensee and ORO would have to decide on the best action at the time. Hence, the term "safer" is used. Change wording.
189	37	The wording/logic contained in the box found in the lower right-hand corner contradicts the wording in Note 6. Assuming the answer is "No" to "GE conditions remain?", then there should be <i>no reason</i> to expand PAR. The wording in the box and the note should be changed to "Continue to monitor the emergency" or equivalent.	PAR Logic Diagram	Attachment Note 6	Disagree. Radiological conditions could hypothetically require expansion of the PAR (e.g, because of field monitoring data, ground shine, or other considerations). Assessment at the time would be appropriate. No change.
190	37	No. 7, pp. 19, states: "These (ETE) values should be representative for the site and should not include special events...the shift staff is expected to make this PAR without conferring with OROs". The statement in Note 7 is unrealistic for two reasons. First, this is a very complex determination for the operational shift to make, as it competes with other plant accident mitigation duties. Furthermore, at this time "T=X hours" following the expected 2-mile evacuation (90th percentile), the shift staff should have relinquished command and control to the augmented ERO, which would be in communication with the ORO(s). The OROs at this time would have more specific information on which set of ETEs to select based on	PAR Logic Diagram 2010 Census/ ETE guidance	Attachment Note 7	Disagree. These parameters are to be considered during planning and incorporated into procedures for rapid use during an emergency. No change.

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191	37	offsite conditions.			
192	48 57E48	Draft Supplement 3 provides timeframes such as ... (Note 9)... which appear to be fixed. The language should be clarified to state these as examples only and appropriate time values would be developed by site-specific analysis. Note 9 on the PAR logic diagram states that the 5-10 mile zone should" Shelter-in-place then evacuate when "safe to do so." Please define "safe to do so" and provide guidance on how this is determined.	PAR Logic Diagram Editorial/ Verbiage	Attachment Note 9	Agree. Change in wording. Agree. The guidance cannot foresee the actual radiological conditions at the time of this very unlikely accident scenario. The hypothetical analyses indicated that at least 4 hours SIP would be needed to reduce dose. However, the licensee and ORO would have to decide on the best action at the time. Hence, the term "safer" is used. Change in wording.
193	48 57E48	The document states that the notes are included with the PAR logic diagram to assist OROs and licensees when they modify the diagram to fit their specific needs. The document should be revised to describe which parts of the logic diagram must remain for the licensee and OR to meet the intent of the guidance. Submitted input for the October 19, 2009 suspense still stands, with exception that more is understood about the HSEEP process now that we have FEMA Region IV guidance with REP EEG development - IPC and MPC conducted already but explain and EEGs not completed. RECOMMENDATION with respect to pets: Use the Site Area Emergency phase to have public SELF RELOCATE pets to "paired" humane shelters/animal clinics to mitigate 1. cross contamination 2. particulate ingestion and 3. the enormous cost of time and money for personnel, equipment and training during the emergency phase (GE). If surveyed respondents must take their pets to shelters; will not leave them at home, then Tennessee can provide disaster location humane shelters/animal clinics as we did during Katrina. This system worked well. State Vet under the AG Department is the lead. We relocate children to "paired" schools during the SAE, why not encourage pet owners to relocate their pets to "paired" humane shelters or animal clinics during the SAE?	PAR Logic Diagram	Section 3	Agree. The guidance provides such direction but can be clarified. Change in wording.
195	6		School/pets/ special needs		Agree. Pet guidance was removed because it is addressed in other emergency response standards. Change in wording.

Comment #	ID	Comment	Keyword	Section/ Page	Adjudication
194	24 23 8 27	Explanation regarding what to do with pets. Informational materials typically state that pets should be left at home or that pets are not allowed at congregate care centers. Research shows that residents are more likely to comply with an evacuation order if they can bring their pet (NRC, 2005; NRC, 2008a), thus, public information materials should not suggest that pets be left at home. Statements such as 'pets are not allowed at congregate care centers'" do not tell residents what to do with their pets. A statement such as "Pets may be brought to congregate care centers, provided they remain in a pet carrier, in the vehicle, or outside at all times," informs the recipient that pets may evacuate with the family but restrictions may apply. The policy on pets must be discussed with the operator of the congregate care centers, as some operators do place restrictions on pets. Ensure any pet guidance aligns with existing/proposed FEMA guidance on pets. Do not duplicate.	School/pets/ special needs	Appendix, A-6	Agree. Pet guidance was removed because it is addressed in other emergency response standards. Change in wording.
196	48 57E48	The document talks about precautionary protective actions. EPA-400 defines Protective Action as: "an activity conducted in response to an incident or potential incident to avoid or reduce radiation dose to members of the public." By this definition, only evacuation and sheltering-in-place can be considered protective actions. All other actions... closing schools and parks, heightened preparedness, etc... should be termed "precautionary actions" since they do not fit the dose avoidance definition of protective action listed in EPA-400.	Precautionary protective actions	Section 1	Disagree. Precautionary protective actions are intended to reduce or avoid dose should a release occur. No change.
197	48 57E48	Change" precautionary protective actions to "precautionary actions."	Precautionary protective actions	Section 2.3	Disagree. Precautionary protective actions are intended to reduce or avoid dose should a release occur. No change.
198	48 57E48	The document states that the PAR Study and the historical record illustrate that precautionary protective actions are prudent only for a Site Area Emergency that is a precursor to a more serious event. How was this determined, since there has not been a Site Area Emergency that evolved into a more serious event	Precautionary protective actions NUREG/ CR-6953, Vol. I, II, and/or III	Section 2.3	Agree. This was determined by review of actual SAE and hypothetical accident consequence analyses of the PAR Study, Volume I. No change.
200	48 57E48	The document states "The analysis evaluated the efficacy of protective actions for the 0 to 2 mile, 2 to 5 mile, and 5 to 10 mile (0 to 3.2 kilometer, 3.2 to 8 kilometer, and 8 to 16 kilometer) zones around a plant." Did the analysis include the entire 2.5, 10 mile zones or the keyhole? Please clarify.	Precautionary protective actions Precautionary protective actions	Section 3	Analysis was a probabilistic risk assessment based on multiple weather trials. Entire radii, not the keyhole, were evaluated. No change.
201	48 57E48	What is meant by "efficacy" of protective actions? How is this determined?	NUREG/ CR-6953, Vol. I, II, and/or III	Section 3	The common definition is intended. This is determined by comparison of health effects in consequence analyses in the PAR Study, Volume I. No change.

Comment #	ID	Comment	Keyword	Section/ Page	Adjudication
199	48 57E48	The documents that the NRC only recommends precautionary protective actions for SAEs that are likely to escalate. An industry-wide review of EAL bases should be performed to determine which SAEs are likely to escalate.	Precautionary protective actions	Section 2.3	Agree. Such a study would be useful, but this would be an industry initiative. No change.
202	14	Recommendation: Define "preferential sheltering". Can this type of shelter be a designated public building or a building accessible to the public? Is there an expectation that a local government provides staffing to operate such a shelter? Public information material should include - actions for those in vehicles when the issue is ordered. Public information material should include - actions for those who are shopping, dining, working.	Preferential sheltering		Agree. The term was removed, as the PAR Study evaluated preferential sheltering and deemed it ineffective for nuclear power plants' EP nationwide. Supplement 3 did not incorporate any requirement for such use. Change in wording.
204	38	Public information material should include - actions for those who are shopping, dining, working.	Public messaging	Appendix, A-8	Agree. Guidance suggests that this information be included in supplemental information bulletins. Change in wording.
205	38	"The following evacuation information should be provided in media broadcasts and on Web Sites when available:" With the amount of information that "should" be provided, broadcasts are likely to get lengthy. You cannot provide a map for a transit dependent evacuation message on the radio. If the event at the NPP causes power outages, people will not have access to the Web, and possibly TV or radio. There is an overload of information. Which message should I play first, the one to transit dependent evacuation [sic] or special facilities evacuation. No priority is defined, who is more important to spend more and more time on a message? "As Federal agencies, such as DHS/FEMA, become integrally involved in the incident the public should be informed that these are planned actions, to avoid unnecessary confusion." Exactly how and when does one inform the public that the Feds will be taking control?	Public messaging	Appendix, A-14+	Disagree in part. OROs responsible at the time of an event are better able to decide how to prioritize messages. Information should be provided in supplemental news bulletins. Change in wording.
207	38	Page A-14- next to last bullet	Public messaging	Appendix, A-18	Disagree. This will not be a State responsibility and need not be addressed in State plans for protective actions. No change.
206	43	Indicates that use of 911 inhibits response support activities. Identify alternate phone numbers and ORO sites where additional information may be obtained via voice or data. Section 3.2, Page A-7: Public information materials should state that the evacuation will be directed by local authorities who will staff traffic control points throughout the evacuation area. Section 3.5, Page A-9: *Describe how authorities expect transit-dependent residents to get to a bus route; *Discuss when the bus runs will start, taking into account that it may take an hour or longer to mobilize drivers and buses; *Discuss how long residents may expect to wait for pickup. Too much detail expected in communication to the public. Public information does not need to go into this much detail. Why would the public need to know who will staff traffic control	Public messaging	Appendix, A-14	Agree. However, this information has been deleted. Change in wording.
203	20 4 23		Public messaging	Appendix, A-7, A-9	Agree in part. The staff agrees on the traffic control issue; however, some of the other information is important in followup messages. This topic has been revised. Change in wording.

Comment #	ID	Comment	Keyword	Section/ Page	Adjudication
		points throughout the evacuation area?			
211	16	BRP believes that the proposed revision to NUREG-0654, Supp. 3 has not received sufficient input from stakeholders and the public. BRP requests that the NRC hold stakeholder workshops and additional public meetings in each NRC Region to gather additional stakeholder and public input, prior to implementing any changes to NUREG- 0654, Supp. 3.	Public outreach		Agree. Additional meetings were held. No change.
210	17	We would request that the NRC coordinate with FEMA to have the appropriate FEMA Radiological Emergency Preparedness program representatives present at the public meeting(s). Due to actual or perceived cross cutting issues affecting Offsite Responding Organizations (ORO) and licensee pre-emergency coordination and emergency protective action decision making, it is imperative that FEMA be engaged in this process with the stakeholders.	Public outreach Coordination— FEMA/ NRC/State ORO vs. licensee responsibility		Agree. FEMA supported public meetings. No change.
213	20	IEMA: IEMA requests that the NRC, with FEMA participation, conduct at least one additional public meeting sometime during the extension period in a location accessible to most stakeholders. After our preliminary review, IEMA believes an additional public meeting is essential to gain additional insights and clarification on how to interpret this new guidance and its impact our current protective action decision making and implementation process. This additional public meeting could also consider changes due to the SOARCA. Issue: More Outreach to OROs is Needed By Both FEMA and NRC Over several years, OROs coordinated with licensees to customize PAR strategies to fit site specific conditions. Many OROs do not see the benefit of significant changes to PAR strategies that were established to meet long-standing federal requirements. The concepts contained in the proposed Supplement 3 guidance represent a major "paradigm shift" for many OROs. We suggest that FEMA as well as NRC consider conducting more coordinated regional outreach to OROs by way of "town hall meetings" or other forums. This will permit both agencies to directly address the public health merits of the proposed changes. Rationale: Further focused and coordinated outreach by both NRC and FEMA at the regional level will assist licensees in gaining ORO acceptance of new PAR strategy changes and help OROs in maintaining the confidence of their constituents.	Public outreach Document availability		Additional public meetings and an extension of the comment period were provided. No change.
212	37		Public outreach PAR development		Agree. Additional meetings were held, and implementation meetings are planned for the appropriate timeframe. No change.

Comment #	ID	Comment	Keyword	Section/ Page	Adjudication
214	43	<p>Emphasis should be placed on individual responsibility for contingency planning, identification of population transit actions, and if necessary a mechanism for the resident to report and request assistance through the OROs. Publications should display exact or potential locations dependent upon incident conditions where the public pickup points are operating. The ORO must encourage neighborhood involvement to ensure all find a method to report to a pickup point if a protective action is implemented.</p> <p>During the Tampa meeting I heard a panel member use the word "hope" three separate times. With all due respect, as an emergency manager, I found that the use of hope as a concept in relationship to a critical NRC planning document to be somewhat disturbing. I've often heard the cliché that 'hope is not a plan'. I don't use the concept of hope in my professional planning and I would expect that neither would the NRC.</p>	Public outreach	Appendix, Section 3.5	Agree. Change in wording.
208	51	The IPC is requesting an extension to the posted comment period to a date no earlier than June 25, 2010. The IPC requests that at least one additional public meeting be conducted in early June in a location accessible to most stakeholders.	Public outreach		Agree. No change.
209	17	It strikes BRP that the 2010 Draft NUREG-0654, Supp. 3 is written from an academic perspective, not a practical one. BRP does not believe that PAR development would be enhanced by adoption of the 2010 Draft NUREG-0654, Supp. 3.	Public outreach		Agree. Additional public meetings and an extension of the comment period were provided. No change.
217	16	DELETE ENTIRELY	Regulatory significance		Disagree. A technical basis has been developed for the proposed Supplement 3 in contrast to the current guidance. Extensive stakeholder input has also improved the document. No change.
215	29	<p>Information and recommendations provided in this segment while valuable goes beyond the copy of US Code of Federal Regulations or NRC/FEMA MOU documents. There is a definite difference between emergency planning guidance issued by FEMA for OROs and the legally established regulatory planning standards dictated by the NRC for nuclear power facilities. That distinction becomes very blurred when information such as this is written and published in an NRC authored document. Once again, the approach of putting information and recommendations of this nature attempts to extend the NRC's influence beyond that of regulating the nuclear power industry.</p> <p>We feel that these actions are an intrusion by the NRC into how the States & Local governments respond to an emergency. Daily activity with our Federal, local and private sector partners in this area allows us to best protect the citizens of North Carolina, which is the ultimate goal for all associated with this program.</p>	Regulatory significance	Appendix, A-1 to A-20	Disagree. Supplement 3 is a joint NRC/FEMA document. No change.

Comment #	ID	Comment	Keyword	Section/ Page	Adjudication
218	29	<p>DELETE ALL</p> <p>How OROs plan and execute their emergency plans is the express responsibility of the individual State or local government. It is these response organizations that determine what the timing of response action to be in the best interest of their citizens. This activity is totally outside the purview of the NRC.</p> <p>Reference: Supplement 3, Introduction, page 3 states: This supplement is considered "Federal Guidance" as referred to in the regulation, and it will be used to aid in determining compliance with 10 CFR 50.47(b)(10)". In Section 2, Implementation of Guidance, page 5, paragraph two states:" The NRC suggests that nuclear power plant licensees and the OROs responsible for implementing protective actions discuss and agree to various elements and criteria of the licensee and ERO PAR logic diagram(s)". This paragraph should be clarified to better define what type of supporting documentation will be adequate to demonstrate that the licensee meets 10 CFR 50 requirements during NRC compliance inspections. We also recommend that NRC define the type of supporting documentation that would need to accompany submissions of revised plan and procedure changes. We recommend that the draft Supplement 3, Section 2 clarify that all background information, analyses, assumptions, unique site-specific characteristics and ORO inputs be contained in a companion document, and not required to be part of the body of the licensee PAR implementing procedure. Rationale: Comment provided to seek clarification for compliance.</p>	Regulatory significance	Section 2, 2.3	Disagree. Providing technically based guidance concerning OROs is not outside the purview of the NRC, in close coordination with FEMA. As noted, the SAFEs experienced since 1980 did not require precautionary protective actions, and a pause to discuss is appropriate. However, this is guidance, and OROs may implement actions as they see fit. No change.
219	37	<p>The regulatory change process licensees should use to revise Emergency Plans are not included this new Federal Guidance. That regulatory change process should be included.</p> <p>I heard it stated by the NRC panel members that this is a guidance document, however I heard it stated by a senior utility operator that it's language is strikingly similar to regulatory compliance language. More needs to be done to rectify that differential.</p> <p>School Evacuation Messaging: The proposed Supplement 3 language encourages having parents come to the schools in the impacted area to pick up their children even when the school is being evacuated. Minnesota does not support this type of messaging as it will encourage people to drive to the school when evacuations are underway way resulting in traffic congestion, confusion and evacuation delays. We have worked very hard to have realistic school evacuation plans that relocate school children to a designated sister school early in an emergency. The parents are informed where to go and pick up their children and child reunification procedures are in place for that site. When children are in school the school has specific custodial responsibilities and they must be maintained during evacuations so that no child is left behind. The reunification</p>	Regulatory significance PAR development	Section 2, page 3 and 5	Agree. Change in wording.
220	44	<p>The regulatory change process licensees should use to revise Emergency Plans are not included this new Federal Guidance. That regulatory change process should be included.</p>	Regulatory significance		Agree. Change in wording.
216	51	<p>I heard it stated by the NRC panel members that this is a guidance document, however I heard it stated by a senior utility operator that it's language is strikingly similar to regulatory compliance language. More needs to be done to rectify that differential.</p> <p>School Evacuation Messaging: The proposed Supplement 3 language encourages having parents come to the schools in the impacted area to pick up their children even when the school is being evacuated. Minnesota does not support this type of messaging as it will encourage people to drive to the school when evacuations are underway way resulting in traffic congestion, confusion and evacuation delays. We have worked very hard to have realistic school evacuation plans that relocate school children to a designated sister school early in an emergency. The parents are informed where to go and pick up their children and child reunification procedures are in place for that site. When children are in school the school has specific custodial responsibilities and they must be maintained during evacuations so that no child is left behind. The reunification</p>	Regulatory significance		Agree. The guidance represents an acceptable method of PAR and PAD development. Other methods may be used and will be considered by the NRC/FEMA for adequacy. Change in wording.
221	22	<p>School Evacuation Messaging: The proposed Supplement 3 language encourages having parents come to the schools in the impacted area to pick up their children even when the school is being evacuated. Minnesota does not support this type of messaging as it will encourage people to drive to the school when evacuations are underway way resulting in traffic congestion, confusion and evacuation delays. We have worked very hard to have realistic school evacuation plans that relocate school children to a designated sister school early in an emergency. The parents are informed where to go and pick up their children and child reunification procedures are in place for that site. When children are in school the school has specific custodial responsibilities and they must be maintained during evacuations so that no child is left behind. The reunification</p>	School/pets/ special needs		Disagree. Supplement 3 only suggests that OROs recognize the issue, not that they encourage parents to pick up children, but this intent can be clarified. Change in wording.

Comment #	ID	Comment	Keyword	Section/ Page	Adjudication
		<p>of children with their parents is a systematic process; encouraging parents to come to a school during an evacuation in progress and pick up children would delay evacuations and not ensure proper reunification with the parents. We recommend the language in Supplement 3 about parents coming to the school during and evacuation to pick up children be removed.</p>			
225	38	<p>"When children are not at school but not at home, the guidance must recognize the need for families to gather children." Where does our responsibility begin and where does it end? "...school evacuation planning should accommodate parents picking up children..." That is irresponsible, considering the effort that OROs have gone into making sure people do not impede evacuations and that parents pick up their children at the appropriate reception center. The school has much more important duties to perform than to deal with parents while trying to evacuate.</p> <p>School Evacuation Messaging: The proposed Supplement 3 language encourages having parents come to the schools in the impacted area to pick up their children even when the school is being evacuated. Harford County does not support this type of messaging as it will encourage people to drive to the school when evacuations are underway way resulting in traffic congestion, confusion and evacuation delays. We have worked very hard to have realistic school evacuation plans that relocate school children to a designated sister school early in an emergency. The parents are informed where to go and pick up their children and child reunification procedures are in place for that site. When children are in school the school has specific custodial responsibilities and they must be maintained during evacuations so that no child is left behind. The reunification of children with their parents is a systematic process; encouraging parents to come to a school during an evacuation in progress and pick up children would delay evacuations and not ensure proper reunification with the parents. We recommend the language in Supplement 3 about parents coming to the school during and evacuation to pick up children be removed.</p> <p>Appendix: Section 3.4</p>	School/pets/ special needs	Appendix, page A-8	Agree. Supplement 3 does not advocate parents picking up children but does recommend some level of planning occur in case they do, because parents may disrupt the school evacuation. This has been deleted. Change in wording.
222	39	<p>School Evacuation Messaging- Recommend language concerning parents reporting to the school during evacuations to pick up students be removed. School administrators in conjunction with the OROs must train parents on protective actions affecting impacted students. This elongates evacuation times, increases confusion and concern. Student in impacted areas must and should be immediately evacuated to a congregate care and host relocation center where</p>	School/pets/ special needs		Disagree in part. Supplement 3 only suggests that OROs recognize the issue, not that they encourage parents to pick up children. However, these items were removed. Change in wording.
223	43	<p>School Evacuation Messaging- Recommend language concerning parents reporting to the school during evacuations to pick up students be removed. School administrators in conjunction with the OROs must train parents on protective actions affecting impacted students. This elongates evacuation times, increases confusion and concern. Student in impacted areas must and should be immediately evacuated to a congregate care and host relocation center where</p>	School/pets/ special needs	Appendix A-8, A-9	Agree. The language does not recommend that parents go to the schools, only that OROs plan for that contingency. However, these items were removed. Change in wording.

Comment #	ID	Comment	Keyword	Section/ Page	Adjudication
		parents may assume accountability and responsibility for their children.			
224	50	One of the incentives to have residents come to the Reception and Care Centers is reunification with their children. It is irresponsible to encourage parents to come to their children's schools to pick up their children. Not only does it impede the evacuation of the school, it unnecessarily exposes the other children to potential exposure while school officials are attempting to accomplish parent/child reunification. The schools have a legal responsibility and potential liability to make sure that children are returned to their legal custodians/guardians. It would be better to perform this at a Reception and Care Center outside the area with a potential for radiological exposure so that it can be accomplished in a safe and orderly manner. It has been the practice of the ORO to encourage reunification at the Reception and Care Center and discourage parents from picking their children up at school. This should be removed from the Supplement.	School/pets/ special needs	Section 4.3.	Agree. Supplement 3 does not encourage parents to come to the schools; it only suggests that OROs plan for this undesirable outcome. These items were removed. Change in wording.
227	32	The Supplement 3 draft now recommends staged evacuation at General Emergency. The draft assumes that communicating the benefits of staged evacuation to the public will be sufficient to prevent shadow evacuation. Are other means to control or direct a staged evacuation being considered or developed? If so, will guidance be provided that describes these measures and how they can be implemented?	Shadow evacuation Public outreach		Agree. The emergency messaging guidance provided can reduce shadow evacuation. No change.
226	37	Spontaneous, voluntary evacuation is still probable even for staged evacuation. Messaging, even when well intended, can lead to public confusion, mistrust and uncertain response. This could lead to a greater burden on ORO resources to control the emergency response.	Shadow evacuation Workload/ resource burden	Attachment Notes 3, 4 and 5	Disagree. Enhanced emergency messaging will reduce shadow evacuation and improve the situation in any case. No change.
229	38	"Increasing shadow evacuations, therefore potentially increasing evacuation times" – what is shadow evacuation?	Shadow evacuation	Section 2.4, page 7	Agree. This will be defined in Supplement 3. Change in wording.

Comment #	ID	Comment	Keyword	Section/ Page	Adjudication
228	39	<p>Supplement 3 imposes a new PAR Logic Diagram and requires a more detailed staged evacuation by evacuating the 2-mile area first and sheltering the 5-mile areas downwind until the 2-mile area is evacuated and then evacuating the 5-mile downwind area. I have reviewed our Evacuation Time Estimate (ETE) studies (August 2003) for the Peach Bottom Atomic Power Plant specifically looking at the evacuation time for the 5-mile sub areas. Harford County, Maryland is not located in the 2-mile EPZ. I have found that the difference in evacuation time from just evacuating the 5-mile area and evacuating the 10-mile area and any combination of the sub areas 10-miles downwind to be negligible. In fact, the 5 mile evacuation for sector Southwest takes 6 hrs and 30 minutes and the 10 mile evacuation for sector Southwest is also 6 hrs and 30 minutes. Based on this information and no overall evacuation time difference there would be no value added in evacuating the 5-mile area and sheltering out to 10-miles downwind and then 10 minutes later evacuating the 10-mile sub areas based on the current guidance. This would also hold true for the PBAPS counties that deal with the proposed 2-mile and 5-mile sub area recommendations. For Harford County, implementation of the proposed staged evacuation, would result in inconsistent public messages, reduced public confidence in the message, confusion of the public and may ultimately lead to delayed evacuation, larger shadow evacuations and a lower level of reasonable assurance for the public. Harford County has trained and educated our public for years that evacuation would be our first choice to protect them and now the recommendation is to change that process. Harford County does not agree with this recommendation at all. Harford County recommends the language in Supplement 3 requiring the staged evacuation be deleted or made optional for sites that choose to use it.</p>	<p>Shadow evacuation Public messaging PAR development</p>		<p>Disagree. Immediate staged evacuation reduces the burden on OROs to manage traffic and allows rapid and relatively low-impact decisionmaking. The PAD need not be expanded until plant conditions are better understood. However, OROs should await the enhanced site-specific ETE that uses the 90-percent values and work through the guidance of Supplement 3 to determine the most protective PAR logic for their sites. It is regrettable that some OROs favor unnecessary and widespread evacuations in areas not affected by the accident. This will delay those most at risk and create a consistency problem for neighboring OROs. Workshops are planned for implementation. No change.</p> <p>Disagree on many points. The staff agrees that strong and immediate protective actions are appropriate in GEs. Supplement 3 provides for an immediate action that protects public health and safety and will rapidly move those at most risk. The Pennsylvania practice of 10-mile evacuations puts those closest to the plant at higher risk, while providing no benefit to those further away and perhaps increasing their risk by evacuating them. Any delay of evacuation for the purpose of traffic control to support a larger evacuation only increases risk to the public. The Three Mile Island accident was a serious event that warranted strong corrective action on many fronts. However, there was nothing in the accident progression that would support the need for evacuation to 10 miles in all directions. The 2-mile ring is only used to communicate that all emergency response planning areas that touch the 2-mile ring should be evacuated initially. This will likely</p>
231	16	<p>Need for Strong, Decisive Protective Actions: Severe reactor accidents are high consequence events. When a plant declares a General Emergency, the engineered safeguards, as well as human intervention, have failed to protect the core. If the event involves a hostile action, security precautions might have failed to protect the core. At General Emergency, we no longer have confidence that operators can control the plant, nor can we predict with confidence the prognosis of the accident in the hours and days ahead. For this reason, strong and decisive protective actions are necessary to protect the public from actual or expected radiological releases from the plant. The most effective protective action (assuming no adverse weather or road conditions) is to move people away from the plant as quickly as possible in a radial evacuation. In simple terms, minimize their time of exposure, and maximize their distance from the source term. The 2010 NUREG-0654, Supp. 3 preference for sheltering-in-place and staged evacuation over immediate radial evacuation reduces the effectiveness of protective actions for the</p>	<p>Shelter in place Staged evacuation</p>		

Comment #	ID	Comment	Keyword	Section/ Page	Adjudication
		<p>public. People are needlessly left in harm's way longer through use of sheltering-in-place and staged evacuation. In the PAR Logic Diagram from the 2010 Draft NUREG-0654, Supp. 3, the distances over which the protective actions are recommended are inadequate. The use of a 2-mile sheltering or evacuation radius, with 5 miles downwind, is frequently recommended in the PAR Logic Diagram. These recommendations ignore the one actual experience we have had with implementing protective actions for a nuclear power plant accident, namely the 1979 TMI-2 accident. The details of the response to this accident are set out in "Staff Reports to the President's Commission on The Accident at Three Mile Island, Emergency Preparedness, Emergency Response," Washington, D.C., October 1979. During the TMI-2 accident, the minimum distance for which protective actions were implemented was 5 miles. Some protective actions were implemented out to a distance of 10 miles. Further, at one point during the accident, a senior NRC official stated that protective actions at distances of 10-20 miles might be needed. In the 2010 Draft NUREG-0654, Supp. 3, the rationale for the recommended 2-mile radius and 5 miles downwind distances is not explained. (If the 2-mile radius for protective actions is based on the Low Population Zone methodology from 10 CFR 100, BRP would have grave concerns, since the Low Population Zone is intended to be used in reactor siting criteria, not for emergency planning.) Two-mile radius distances for protective actions were deemed inadequate in 1979, and are still inadequate today for almost all scenarios resulting in a General Emergency.</p> <p>Overall, BRP has serious reservations about the 2010 Draft NUREG-0654, Supp. 3 document. We do not believe this document advances Protective Action Recommendation (PAR) development relative to the 1996 version of NUREG-0654, Supp. 3. The revised document relies on a flawed technical study, NUREG/CR-6953, "Review of NUREG-0654, Supplement 3, Criteria for Protective Action Recommendations for Severe Accidents, Volumes 1 and 2," (NRC, 2007a, and NRC, 2008) (referred to as the PAR Study), to provide a technical basis for concluding that under certain specified conditions sheltering-in-place and staged evacuation can be more protective to public health and safety than radial evacuation. It also promotes an overly complicated PAR Logic Diagram, which is accompanied by three pages of dense footnotes. It is our view that the 2010 Draft NUREG-0654, Supp. 3 document misses the basic point that for a severe reactor accident (at a General Emergency classification), the most effective protective action is to move the population away from the plant as quickly as possible in a radial evacuation. Extending the use of sheltering-in-place and staged evacuation is counterproductive.</p>			<p>result in a more extensive evacuation than those within 2 miles of the plant. No change.</p>
233	16		<p>Shelter in place Staged evacuation NUREG/ CR-6953, Vol. I, II, and/or III</p>		<p>Disagree for many reasons. Widespread and unnecessary evacuation detracts from public safety by delaying those closest to the plant, while roads are clogged with evacuees who would have been better served by SIP or heightened preparedness. Supplement 3 recommends immediate evacuation of the most-at-risk population because this action is more protective than a widespread and unnecessary evacuation that delays those closest to the plant. The PAR Study contained this and other insights and provided a basis, approved by the Advisory Committee on Reactor Safety and the Commission, for updating the 1996 Logic Diagram is simplified considerably when site-specific elements are incorporated. No change.</p>

Comment #	ID	Comment	Keyword	Section/ Page	Adjudication
235	38	"Use of large public structures" - who will determine which public structures are safe enough to provide "preferential sheltering"?	Shelter in place	Section 1, page 1	Agree. OROs would make the decision, but preferential sheltering was not found to be effective and is not recommended for implementation. Reference removed Change in wording.
236	38	"Sheltering-in-place should receive more emphasis... at sites with longer evacuation times." Define "longer."	Shelter in place	Section 1, page 2	Agree. Supplement 3 specifies times when SIP is more protective than evacuation. No change.
237	38	Details should be included on expected actions for the following situations: those in vehicles when the order is issued; those whose family members are not together at home. - again, where does our responsibility begin and where does it end? Shelter in Place- Allow other areas under an evacuation order to evacuate unimpeded. The intent is for the public to remain where they are, or seek shelter close by, but not to return home to shelter. The licensee may offer recommendations based on plant status. However, the OROs with their executive leadership are ultimately accountable to and responsible for implementing protective action decisions.	Shelter in place	Appendix, page A-9	Agree. People must be responsible for themselves, but evacuation and SIP instructions can be explained in more detail during supplemental news bulletins. No change.
246	43		Shelter in place	Attachment Note 3	Agree. No change.
238	44	The guidance discusses how to handle impediments to evacuation, but does not consider the case where Sheltering in Place (SIP) could be more hazardous due to extreme weather conditions (e.g., heat or cold). This needs to be considered in the guidance. For states like Illinois that have more than one nuclear power plant site, it is conceivable that for a hypothetical accident, evacuation is the preferred strategy at one site while shelter may be the preferred strategy at another site. What does the NRC recommend for such instances? Does the NRC intend to provide support to state and local government decision makers to explain the basis for the radically different actions taken in response to the exact same event?	Shelter in place		Disagree. Should conditions warrant SIP, OROs are quite capable of providing appropriate direction without Federal instruction. If SIP is necessary because it is more protective than evacuation, there are methods of cooling or warming at-risk populations while ventilation is turned off. No change.
239	55	Previous NRC guidance has stated that evacuation is the preferred strategy unless there is a short term release of less than one hour. Can you explain the technical flaw that now makes this guidance obsolete?	Shelter in place		Agree. This could hypothetically occur, but it does not seem likely that PADs would differ substantially for the same scenario at different sites with similar populations. The NRC intends to conduct implementation meetings. No change.
240	55		Shelter in place Not constructive		Agree. The current guidance is being enhanced based on the technical insights gained from the PAR Study. No change.

Comment #	ID	Comment	Keyword	Section/ Page	Adjudication
241	55	<p>On page 38 of NUREG/CR-6953, section 5.4.1 talks about the Rapidly Progressing Accident. The accident chosen for this analysis also referenced on page 38 is the so called ST-1 which is an accident where the release starts 40 minutes after the General Emergency was declared and the release lasts for 6 hours. Section 5.4.1 also refers to table 5.3D on page 40 which is based on a 10 hour ETE. This table points out that radial evacuation is the least effective strategy and various shelter strategies are more effective. The statement at the bottom of section 3.4.1 is made that, "This analysis is supportive of a conclusion to revise NUREG-0654, Supplement 3 to include more detail on the decision process for selecting a shelter based protective action". Several observations are in order here. First of all the soon to be issued SOARCA analysis concludes that the so called ST: 1 accident is no longer thought to be a credible accident. In addition most nuclear plants in the United States have ETE's that are much less than 10 hours. It is also generally recognized that most severe accidents are unpredictable and therefore impossible to determine the release duration. The benefit of determining a shelter strategy assumes you know the release duration so you may weigh the benefits of shelter vs. evacuation. In a real life situation this may not be the case.</p>	<p>Shelter in place Document availability</p>		<p>Agree in part. SOARCA is not approved and is not used for regulatory purposes at this time. However, Volume 3 of the PAR Study addresses the type of LER that is credible, if very unlikely, and the LER remains in the EP planning basis. Such accidents would be unpredictable—hence, the recommendation that the SIP period be determined by radiological assessment and not be set for a predetermined time. However, what is certain is that evacuation into a serious radiological plume is not protective if the ETE is long. Supplement 3 reflects this guidance. No change.</p>
242	55	<p>The decision to shelter is dependent on the source term and release timing. If you take a look at the results for the ST-1 M which is the same magnitude source term as the ST-1 but instead of a 40 minute release time it is now up to 3 hours still a relatively short release time you find that shelter in place for 4 hours followed by a radial evacuation has less benefit than evacuation for all cases studied. This is again from NUREG/CR- 6953, Volume 1 pages 43-45. Likewise for this same case a shelter in place for 8 hours followed by evacuation is only beneficial when ETEs are greater than 6 hours.</p>	<p>Shelter in place NUREG/ CR-6953, Vol. I, II, and/or III</p>		<p>Agree. However, staged evacuation has several other advantages. No change.</p>
243	55	<p>Shelter clearly has some benefits over evacuation when the public can not be evacuated in a timely manner. There are so many variables that determine when shelter should be selected that it is hard to specify these in the PAR flowchart and notes. Therefore our recommendation is to remove all references to specific ETEs and leave the decision up to best engineering judgment.</p>	<p>Shelter in place PAR development</p>		<p>Disagree. The analyses of the PAR Study provide a good basis for preplanning such decisions and allow rapid PAR and PAD. Using deliberative processes for the initial PAR could delay the PAD and increase consequences. No change.</p>

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244	59	<p>Pennsylvania does recognize the benefit of sheltering-in-place and the radial evacuation concept. Pennsylvania also recognizes the benefit of studying and implementing improved sheltering arrangements for special populations such as long term care facilities and dependent care facilities such as detention facilities, health care facilities and other related facilities. Lastly, Pennsylvania does understand and recognize the benefits of the early implementation of protective actions such as early dismissal, the closing of parks and recreational areas and non-essential facilities well in advance of a General Emergency classification. Pennsylvania does wish to caution the NRC and FEMA that the utilization of early dismissal of schools and the return of students to their homes within the Plume Exposure Pathway EPZ is not an advisable method due to potential of the students not having a further means to evacuate if they are at home without adult supervision. Most schools are considered to be serving in a status of <i>loco parentis</i> during normal school hours. An early dismissal disrupts the normal school day and therefore negates the ability of the school to have accountability of the students and their safety.</p> <p>State and local officials have been conducting shelter-in-place and evacuations related other hazard emergencies for many years now and are pretty well prepared to do so for nuclear power station emergencies as well should the need arise. While the NRC is perfectly within its rights to conduct studies and its staff agree or disagree with those studies, the NRC has no authority to direct State and locals in what protective actions they should take. Trying to apply pressure to States and Locals thru rules and regulations on the Utilities to comply with NRC and FEMA views not appropriate. Could result in the loss of nuclear power plants when the nation needs more nuclear power instead of less. Will result in loss of participation by volunteer emergency first responder agencies.</p>	<p>Shelter in place</p> <p>Staged evacuation</p> <p>School/ pets/ special needs</p>		<p>Agree. Change in wording.</p>
245	8 38E8	<p>The study results, documented in NUREGCR-6953, 'Review of NUREG-0654, Supplement 3, 'Criteria for Protective Action Recommendations for Severe Accidents,' Volumes 1 and 2, (NRC, 2007a and NRC, 2008), (hereafter referred to as the PAR Study), show that shelter-in-place and staged evacuation can be more protective to public health and safety than radial evacuation, providing a technical basis for improving NRC PAR guidance.</p> <p>The use of calculations and computer modeling may show a lower dose received for the most at risk members of the public, however, the public will actually follow the protective action decisions made and will "shelter in place" or be on "heightened preparedness" instead of evacuating themselves.</p> <p>In theory, a staged evacuation looks good and modeling shows that</p>	<p>Shelter in place</p> <p>Regulatory significance</p>		<p>Agree. OROs are encouraged to consider the guidance. No change.</p>
234	24 23 27		<p>Shelter in place</p> <p>Staged evacuation</p> <p>NUREG/ CR-6953, Vols. I, II, and/or III</p>	<p>Section 1, page 1</p>	<p>Agree. Volume 2 of the PAR Study and many other sociological studies of public emergency response show that enhanced emergency messaging can improve public compliance with PADs. Without those enhancements, the public may well make decisions counter to the PAD. No change.</p>

Comment #	ID	Comment	Keyword	Section/ Page	Adjudication
		it would be more effective. However, where is the 'behavioral analysis/studies' to show people would really comply with the request? Actual emergencies show that people will spontaneously evacuate when informed of an emergency that may/will require it. Example: Hurricane headed for the Outer Banks, N. C.; the Florida Keys.			
247	4857E48	Note 10 states that for the hypothetical site analyzed, 4 hours is the break-even point for when sheltering-in-place provides a reduction in dose to a member of the public over the dose received during an evacuation. This break-even point will vary depending on EPZ population distribution and characteristics of the radiological release. The document should be revised to provide guidance for how to determine this break-even point. "Sheltering-in-Place Message"	Shelter in place PAR Logic Diagram	Attachment Note 10	Agree. The guidance cannot foresee the actual radiological conditions at the time of this very unlikely accident scenario. The guidance has been changed to suggest that the decision be made based on the best available information. Change in wording.
230	838E8	In Sub-Paragraph 1, it states, "An impediment to shelter-in-place may include loss of power or loss of communication systems. When these systems are not available to inform the public to take shelter and subsequently to inform the public when to exit the shelter and evacuate, then the effectiveness of shelter-in-place as a protective action may not be achieved." Is this not already stating the obvious? In addition, if one insists on putting this statement in the new Sup 3, then look at Paragraph 3.6 "Shelter-in-Place" on page A-9. Potential Impact: This statement could very well be considered an affront to State and Local Planners who deal with such considerations every day. Question: What if it is State policy to evacuate and only shelter-in-place as a last resort? NRC needs to rethink this. When it is 80 to 100 degrees outside, people who are instructed to shelter-in-place in most instances will not turn off A/C, seal windows and doors. Once again NRC is getting into the weeds on what needs to be in a plan and in messages. Potential Impact: Confusion as to who is dictating evacuation policy, the Federal Government, specifically the NRC, FEMA, or EPA? Leads one to question the planning guidance because of the vagueness of statements and creates confusion within State and local agencies.	Shelter in place	Appendix, A-13	Agree. Change in wording.
232	838E8		Shelter in place Not constructive	Appendix A-9,	Disagree. The NRC and FEMA are providing guidance based on technical analyses in order to enhance protective action decisionmaking. If conditions warrant SIP, OROs are quite capable of providing appropriate direction without Federal instruction. If SIP is necessary because it is more protective than evacuation, if the event occurs during hot weather, there are methods of cooling at-risk populations when ventilation is turned off. No change.
251	55	There are conclusions drawn from the "State-of-the-Art Reactor Consequence Analysis" in this document. Why was this document not used in the development of the PAR logic?	Document availability PAR Logic Diagram		Disagree. SOARCA is neither approved nor published and cannot be used at this time. No change.
248	57E48	The document states "As the PAR Study indicates, a nuclear power plant accident that leads to a rapidly progressing release is a very unlikely scenario..." This statement should reference the SOARCA,	Document availability	Section 3	Disagree. SOARCA will not be published in the near future and will no longer be referenced in Supplement 3. No change.

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		not the PAR study.			
249	48 57E48	Information from NRC's recent SOARCA study is not considered in the document. Preliminary information from the SOARCA study indicates that there will be ramifications for radiological emergency planning, including potential revisions to the size of the EPZ and need for protective actions. Recommended revisions to the PAR process such as incorporation of staged and lateral evacuations should be evaluated against the findings of the SOARCA.	Document availability		Disagree. SOARCA is not currently approved or published and will not be referenced in Supplement 3. Any regulatory changes based on SOARCA will await Commission direction. No change.
250	4857E48	Note 10 states that the 2-10 mile downwind sectors should be evacuated when the 0-2 mile evacuation is nearing completion. This implies that this type of accident will produce a radiological release that requires protective actions based on dose assessment out to 10 miles. This is inconsistent with preliminary information from the SOARCA, which says that a 4-mile EPZ is sufficient.	PAR Logic Diagram	Attachment Note 10	Disagree. SOARCA is neither published nor approved, and the preliminary unpublished results do not indicate that a 4-mile evacuation is sufficient. The commenter may be referring to an analysis by RBR Consultants that reached that conclusion, but the NRC staff does not agree with the RBR finding. No change.
254	37	The variety and extent of suggested outreach methods for assistance of special needs populations may artificially raise expectations for other non-radiological emergencies. The common wisdom has been for such groups and individuals to pre-plan and obtain help from family, friends and neighbors.	School/pets/ special needs		Agree. This should be stated. Change in wording.
253	38	Including questions on an "evacuation assistance" registration card to elicit a response, such as asking if the resident has a pet, will provoke more people to register, though not because they need assistance. It is liable to confuse people into registering when they do not need to.	School/pets/ special needs	Appendix, A-10	Disagree. Special needs individuals are an underserved population that should be planned for. No change.
252	8 38E8	"3.7 Special Needs Individuals" Sub-Paragraph 2 states "Although most EPZ residents have reviewed the public information brochures (NRC, 2008b), of those who stated they may need evacuation assistance, 42 percent indicated they did not know they could register." Does the statement, "most EPZ residents have reviewed the public information brochure.." mean of all people living in the EPZ or just those with special needs? Does the statement "of those show stated they may need evacuation assistance, 42 percent indicate they did not know they could register." mean 42 percent of everyone within the EPZ or just of the Special Needs Population? If this 42 percent is of the Special Needs Population, it does not equate with the previous sub-paragraph where there is the discussion of only 29% of the 6% requiring assistance in evacuating. Potential Impact: Very confusing and written to try and justify NRC desires further into this paragraph.	School/pets/ special needs	Appendix, A-10	Disagree. NUREG/CR-6953 explains the data from the EPZ public survey. Please call the NRC staff for discussion if necessary. No change.

Comment #	ID	Comment	Keyword	Section/ Page	Adjudication
255	838E8	<p>"3.7 Special Needs Individuals" Per sub-paragraph one if one can understand this right: According to NRC research, 8% of the population of an EPZ (let's say the EPZ has 100 people) may require assistance, (8 people). NRC research further states that a quarter of those 8% (2 people) could evacuate on their own, leaving 6% (or 6 people) who will need assistance. NRC research then "indicates" that of that 6%, only 29% (that's 1.74 persons) have registered with local authorities. NRC research further indicates another 29% of the that 6% (again, that is 1.74 persons) don't know how to register. What has happened to the other 2.52 people of the six people that need assistance with evacuation? Survey numbers can be made to mean whatever a sponsoring agency wants them to mean. Having less than two people in 100 not knowing how to register is probably a very good response considering the population variables.</p> <p>Potential Impact: Meaningless Hyperbole creating confusion trying to impact planning guidance.</p> <p>Proposed staged evacuations:</p> <p>Supplement 3 imposes a new PAR Logic Diagram and requires a more detailed staged evacuation by evacuating the 2-mile area first and sheltering the 5-mile areas downwind until the 2-mile area is evacuated and then evacuating the 5-mile downwind area. I have reviewed our Evacuation Time Estimate (ETE) studies (updated in December 2008) for both of our plants in Minnesota specifically looking at the evacuation time for the 2-mile and 5-mile sub areas. We have found that the difference in evacuation time from just evacuating the 2-mile area and evacuating the 2-mile area and any combination of the sub areas 5-miles downwind only results in a 10 minute difference in overall evacuation time for each site. Based on the 10 minute overall evacuation time difference there would be no value added in evacuating the 2-mile area and sheltering out to 5-miles downwind and then 10 minutes later evacuating the 5-mile sub areas based on the current guidance. For Minnesota, implementation of the proposed staged evacuation, would result in inconsistent public messages, reduced public confidence in the message, confusion of the public and may ultimately lead to delayed evacuation, larger shadow evacuations and a lower level of reasonable assurance for the public. We recommend the language in Supplement 3 requiring the staged evacuation be made optional for sites with low overall evacuation times.</p>	School/pets/ special needs	Appendix.A-10	Disagree. NUREG/CR-6953 explains the data from the EPZ public survey. Please call the NRC staff for discussion if necessary. No change.
257	22	<p>Supplement 3 requires the 2-mile area and any combination of the sub areas 5-miles downwind only results in a 10 minute difference in overall evacuation time for each site. Based on the 10 minute overall evacuation time difference there would be no value added in evacuating the 2-mile area and sheltering out to 5-miles downwind and then 10 minutes later evacuating the 5-mile sub areas based on the current guidance. For Minnesota, implementation of the proposed staged evacuation, would result in inconsistent public messages, reduced public confidence in the message, confusion of the public and may ultimately lead to delayed evacuation, larger shadow evacuations and a lower level of reasonable assurance for the public. We recommend the language in Supplement 3 requiring the staged evacuation be made optional for sites with low overall evacuation times.</p>	Staged evacuation PAR development		Agree. This may be an appropriate determination, but OROs should await the enhanced site-specific ETE that uses the 90-percent values and work through the guidance of Supplement 3 to determine the most protective PAR logic for their sites. No change.

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258	25	<p>The fourth paragraph states, "For sites where the 90-percent ETE for the general public of the full EPZ is less than about 3 hours, results showed that for the rapidly progressing scenario, evacuation is the most appropriate protective action." A review of the ETE for Columbia Generating Station (CGS) showed that the entire EPZ (100%) could be evacuated in 2 hours and 57 minutes. This demonstrates that the current ORO policy of evacuation as the preferred PAR is adequate for lower population area EPZ with good road networks. It was noted by our ERO and ORO organizations that many of the changes within the draft Supplement 3 are geared towards nuclear power plants that have large populations within the 10-mile plume exposure pathway EPZ. It is critical that a level of flexibility be included in this section so that protective actions such as staged evacuation and heightened preparedness are not a requirement regardless of the situation within each NPP EPZ.</p> <p>Paragraph 3.3 - Staged Evacuation. The paragraph is worded so that it would be a requirement for public informational materials to explain Staged Evacuation even though it may not be one of the protective actions utilized by the ORO's. This is especially true in lower population areas with good road networks. Recommend adding an additional comment to drop the requirement or make it required only if the local ORO's elect to utilize staged evacuation as one of the protective actions that they might use.</p>	<p>Staged evacuation PAR development</p>	Section 4	<p>Agree. This may be an appropriate determination, but OROs should await the enhanced site-specific ETE that uses the 90-percent values and work through the guidance of Supplement 3 to determine the most protective PAR logic for their sites. No change.</p>
259	25	<p>REVISE/REWRITE Guidance presented in this paragraph is counter to previous recommendations and the specified factors (Para 2) influencing an efficient safe evacuation. Even if the 0-2 mile 90% ETE evacuation shows to be 2 hours or less, this places evacuees in a more hazardous position – outside, in a vehicle, susceptible to the effects of the plume – for possibly 1 hour or more based on the NRC definition of a rapidly progressing event. This goes counter to one of the basic concepts of Emergency managements which is to "NOT put citizens or responders in a more hazardous situation that they are in currently."</p>	<p>Staged evacuation Public outreach Regulatory significance</p>	Appendix	<p>Agree. However, the guidance is written at the national level. OROs should await the enhanced site-specific ETE that uses the 90-percent values and work through the guidance of Supplement 3 to determine the most protective PAR logic for their sites. No change.</p>
260	29	<p>We have not yet evaluated the time difference between staged evacuations and the current evacuation methods in our EPZs. If these evaluations do not reveal a significant time savings, will we still be required to use staged evacuation? If a significant time savings is not realized, changing the evacuation method would not be worth the effort to re-educate the public which has been conditioned to the current evacuation plans for twenty years. If we are required to adopt staged evacuation what training, workshops or guidance documents will be provided to assist in the transition to this new protective action? How long will jurisdictions be given to integrate staged evacuation into their plans and procedures?</p>	Staged evacuation	Section 3, page 9	<p>Disagree. The 2-hour figure used in this guidance is the time to clear the EPZ, and if staged evacuation is effectively used, those closest to the plant will be well beyond the range of severe exposure rather rapidly. While they will be exposed, the dose will likely be lower than if other strategies are used. No change.</p>
261	32	<p>We have not yet evaluated the time difference between staged evacuations and the current evacuation methods in our EPZs. If these evaluations do not reveal a significant time savings, will we still be required to use staged evacuation? If a significant time savings is not realized, changing the evacuation method would not be worth the effort to re-educate the public which has been conditioned to the current evacuation plans for twenty years. If we are required to adopt staged evacuation what training, workshops or guidance documents will be provided to assist in the transition to this new protective action? How long will jurisdictions be given to integrate staged evacuation into their plans and procedures?</p>	<p>Staged evacuation Implementation</p>		<p>Agree. Immediate staged evacuation reduces the burden on OROs of managing traffic and allows rapid and relatively low-impact decisionmaking. The PAD need not be expanded until plant conditions are better understood. OROs should await the enhanced site-specific ETE that uses the 90-percent values and work through the guidance of Supplement 3 to determine the most protective PAR logic for their sites. Workshops are planned for implementation. No change.</p>

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266	43	Evacuation after the Initial Shelter in Place- NRC needs to understand that flooding the public with continuous messaging in a very short period of time on diverse protective action decisions causes undue confusion and ultimately floods Public Safety Answering Points (PSAPS) with unnecessary inquiries. Organizational history based on other type of hazardous substance releases substantiate the necessity of having a single, clearly understood message supporting the Government Authority Having Jurisdiction (AHJ)	Staged evacuation Public messaging	Note 10	Agree in part. Please see Milletti's research as captured in the PAR Study, Volume 1. The public will be anxious to receive information at the time of an emergency. If OROs do not provide it, others will. A single voice is good, but a single message will not elicit the desired protective response. However, the staff agrees that "continuous" is not appropriate and will modify the language. Change in wording.
263	44	The guidance mentions that evacuation traffic will be directed by local authorities staffing traffic control points. Some offsite plans do not use traffic control points, but rather use EPZ access control points while allowing "free flow" of traffic exiting the EPZ. The guidance needs to allow for this option.	Staged evacuation Staged evacuation		Agree. Change in wording. Disagree. Staged evacuation has been widely used and will be effective if emergency messaging is sufficient. No change.
262	51	Despite all the studies, I don't believe that staged evacuations will be achievable. That concept needs to be reconsidered.	Not constructive		
264	55	PAR decisions are based on 2 mile and 5 mile evacuation time estimates. Some state plans use Emergency Response Planning Areas that do not include 2 mile areas. The guidance needs to be clarified to reference ETEs to the preplanned sub-areas that are actually evacuated and not an imaginary 2 mile circle. As an example some low population EPZs evacuate almost a 5 mile area as that is the smallest sub-area than can be evacuated.	Staged evacuation		Agree. The 2-mile area is intended to encompass all emergency response planning areas involved. Change in wording.
265	55	It is not clear from the Supplement 3 document if consideration was given to low population EPZs in that while ETEs were varied to simulate different population densities there appears to be no analysis of EPZs where the population density varies from close to zero to higher values near the edge of the EPZ.	Staged evacuation		Disagree. The guidance should be adapted to the site-specific situation. OROs should await the enhanced site-specific ETE that uses the 90-percent values and work through the guidance of Supplement 3 to determine the most protective PAR logic for their sites. Workshops are planned for implementation. No change.
267	57E48	The PAR logic diagram essentially changes the standard GE PAR to evacuate 0-2 miles, shelter-in-place 2-5 miles downwind and place the remainder of the EPZ on heightened preparedness. For sites with high stacks, elevated releases can result in higher doses further from the plant. The document should include consideration of this scenario when staged evacuation is being contemplated.	Staged evacuation PAR Logic Diagram	Attachment	Agree. Change in wording.
256	838E8	This paragraph states, "Staged evacuation, introduced in this update to Supplement 3, is the preferred initial protective action in response to a General Emergency because it is more protective of the public health and safety than other actions (NRC, 2007)." The NRC study may be correct for highly populated areas. However, for unpopulated areas around the nuclear power stations, might it be safer to evacuate everyone at once? This paragraph does not identify whose preferred method this is, is it the NRC's? FEMA's? EPA's? Potential Impact: Confusion as to who is dictating evacuation policy, the Federal Government, specifically the NRC, FEMA, or	Staged evacuation Coordination— FEMA/NRC/State	Appendix A-8	Disagree. The document is a joint NRC/FEMA document, and it presents a joint view. Policy is not dictated. This is guidance based on technical analyses and considerable stakeholder input. No change.

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		EPA? Leads one to question the planning guidance because of the vagueness of statements and creates confusion within State and local agencies.			
269	53	During the July 21, 2010 public meeting in Tampa, Florida, the FEMA and NRC Staff indicated that the proposed NUREG guidance cannot be "shelved," what approach will the back-fit analysis per 10 CFR 50.109 take? How can licensees have input into that analysis? How is the back-fit analysis conducted for a NUREG?	Supplement 3 legality		Disagree. Supplement 3 is guidance and gives an acceptable method for compliance. Other methods could also be acceptable and may be submitted for NRC approval. No change.
270	59	While DOCKET NUMBER: NRC_2010-0080 presents a reasonable academic look at the previous Protective Action Logic and studies, we hereby request that additional work be conducted including a thorough review of the laws, policies and regulations which address protective action decisions of all of the nuclear power plant Offsite-Response-Organization stakeholders including the States, Commonwealths, Counties, Municipalities and School Districts.	Supplement 3 legality		Disagree. Local laws and policy should be appropriately embodied in ORO FEMA-approved plans. Nationwide study by the NRC would not add value to local emergency planning. No change.
268	128E12	Section 6, References, lists the supporting documents for the draft NUREG-0654/FEMA-REP, Rev.1, Supplement 3. One of the documents listed is NUREG/ CR 6953 Vol. III. "Review of NUREG-0654, Supplement 3, 'Criteria for Protection Action Recommendations for Sever Accidents. Technical Basis for Protective Action Logic Diagram." NRC: Washington, D.C. 2010 Draft. It would appear from the title this document is critical to the review and validation of the draft NUREG-0654/FEMA-REP-1, Rev. 1, Supplement 3 since it provides the technical basis. Yet the reference indicated that it is still in draft form. Further investigation has revealed that the document is not currently available for public review. Again, it is inappropriate to publish guidance documents such as NUREG-0654/FEMA-REP-1, Rev. 1, Supplement 3 based on a draft document that is not publically available for reference.	Supplement 3 legality	Section 6	Disagree. Volume 3 is available on the NRC Web site and at www.regulations.gov . No change.
271	16	Technical Basis for 2010 Draft NUREG-0654, Supp. 3: In BRP's view, the PAR Study that this document relies on heavily is a weak basis for the sweeping recommendations that are derived from it. The PAR Study used Focus Groups and Telephone Surveys to develop a basis for its findings on the effectiveness of protective actions, particularly sheltering-in-place and staged evacuation. The PAR Study highlights data that supports sheltering-in-place and staged evacuation, but gives short shrift to data which casts doubt on these strategies. For example, in the Emergency Responder Focus Group section (NRC, 2008, page 16), it is noted that emergency	NUREG/ CR-6953, Vol. I, II, and/or III	Page 16	Disagree. The telephone survey represents individuals' opinions at the time of the survey, and the NRC recognizes that actual performance could be different in an actual emergency. However, research on public emergency response (PAR Study, Volume 1) indicates that the emergency message affects the response deeply. For this reason, the guidance on emergency messaging and public education was included with Supplement 3. For the evacuation or SIP to succeed, the message must be appropriate. The statistical significance of the focus groups

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		<p>responders believed that if a sheltering-in-place protective action was ordered, the public would be unlikely to comply. On the same page, emergency responders frequently expressed the view that the public is likely to do what they feel is best for their family, even if it is different from the protective action recommended. However, the focus group data was discounted, and in the Executive Summary (NRC, 2008, page viii) the authors write, "The telephone survey data indicates that compliance with protective actions is likely and also identified that not all of the focus group themes were valid when assessed against the larger data set of the public telephone survey." BRP has serious doubts about the value of a nuclear power plant in determining how people in the vicinity of a nuclear power plant would behave in an actual emergency. Does calling people on a calm day and asking questions about their response to an accident reflect what their actual behavior would be in the crisis of an emergency, when sirens are sounding, the TV and radio are announcing a severe reactor accident at a nearby nuclear plant, phones are ringing off the hook, and people are streaming down the road away from the plant? It appears that the focus groups, particularly those involving emergency responders, provided a more realistic view of the reaction by the public during an emergency. The phone survey was convenient to do, but is not a very credible instrument.</p>			<p>is very much less than that of the telephone survey. The survey found that public opinion was different in many ways from what responders in focus groups expected. No change.</p>
277	16	<p>Implementation by State and Local Government: The 2010 Draft NUREG-0654, Supp. 3 document proposes several strategies that would require participation of State and Local Governments for successful implementation. Several of these strategies would impose new requirements on State and Local Governments and would require additional resources and funding:-- State and Local Governments would need to work with licensees in the development of various elements and criteria of the licensees' PAR logic diagram;-- State and Local Governments would need to develop detailed implementation guidance for staged evacuation, extended use of sheltering-in-place, and specific enhancements in the improvement of communications to the public. BRP is concerned that State and Local Governments will be saddled with these new requirements, without additional resources to address them.</p>	Workload/ resource burden		<p>Agree. Implementation time will be given to allow orderly development. No change.</p>
278	33	<p>The current structure of radiological preparedness has worked well for the utilities, states and counties of Nebraska and Iowa. The proposed changes to PAR guidance would cause these entities to incur significant costs without significantly improving public safety.</p>	Workload/ resource burden		<p>Disagree. The current PAR strategy is a draft for comment, is not based on GE declaration as is practiced, and is 15 years old. The PAR Study supports enhancement. No change.</p>

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272	38	"Emergency response agencies should monitor social networks..." "The use of blog sites by emergency management agencies is helpful..." "Response personnel can use cell phones to send text, photos, or video directly to their Web sites to provide first hand credible information..." These suggestions are nice, but it is truly guidance or will the "should be considered" morph into a "must be considered" interpretation? Of all the NPP OROs in the US, what percentage have the capability to perform this? What percentage have the manpower to do this and respond? During Katrina, neither cell nor Web would have been of use in the area. We need to make sure we do not develop a reliance upon technology that may not be available when the need arises, nor do we want to overload cell towers during an emergency.	Workload/ resource burden Public messaging Regulatory significance	Appendix, A-18	Agree. These were suggestions for ORO consideration, not requirements, but the guidance has been removed. Change in wording.
279	53	The implementation guidance needs to acknowledge that the change management will be expensive, confusing to the public, take a long duration, will require periodic reinforcement to internalize, and require effort to accumulate the "old" documents such as brochures, calendars, phone books, refrigerator magnets, etc. and re-issue updated materials.	Workload/ resource burden Implementation		Agree. Implementation time will be given to allow orderly development. No change.
280	53	Has the NRC conducted a backfit analysis that examines the high cost of the change management for this program with an emphasis on the cost to "re-train" the local populace and OROs? The implementation guidance should address the economic considerations, if any, may be applied to the selection of PAR strategies? If a cumulative exposure of 10 person-Rem can be avoided by a particular strategy during a hypothetical, but unlikely, accident; but, costs half a million dollars a year for the ORO to maintain, is this a desirable strategy? Similarly, if a nearby community were to incur significant costs as the result of a strategy with a potentially low savings in overall exposure, is there a consideration basis for this factor?	Workload/ resource burden Regulatory significance		Disagree. Supplement 3 is guidance and not mandatory. Other methods may be submitted for consideration. Change in wording.
281	53	I have read NUREG-0654, FEMA-REP-1, Rev. 1, Supplement 3 SAND2010-0293P. I understand the survey data and the intent and concur generally with recommendations. However, any changes to the notification process to citizens in the 10-Mile EPZ, sheltering requirements or anything which results in costs to Pickens County, is not and probably will not be funded. Funding must be provided by either the Federal, State governments or the licensee.	Workload/ resource burden		Disagree. The new system is not expected to cost more than the old system. No change.
276	15		Workload/ resource burden		Agree. The implementation period will attempt to accommodate ORO resource demands. No change.

Comment #	ID	Comment	Keyword	Section/ Page	Adjudication
274	8 38E8	Every state and local governmental agency desires to ensure that it has the capability to protect the health and safety of the public and its citizens. However, the changes recommended by the NRC/FEMA such as inserting or re-inserting the "Fast-Breaking", "HAB Event", "No-Notice" and "After-Hours" exercises only serves to place more of a burden on the States and Locals for planning and to prove they can pass an exercise. In a real event, notifying the public is going to take as long as our political leaders decide its [sic] going to take. In a real event, people are going to get their information from their favorite news source(s) and not rely on single radio station, no matter what an EAS message says. If the NRC and FEMA are going to want additional information in messages and additional messages developed, prescripted, and prerecorded, then the NRC and FEMA had better be prepared to provide funding for personnel needed to meet the new requirements or else be prepared to send Federal REP planners to assist State and Local jurisdictions in writing them. You cannot have pre-scripted and pre-recorded messages for every contingency. Not only would paper copies of these fill filing cabinets if it was attempted, but no one could find the proper message in the applicable time limit allowed by FEMA. Potential Impact: Unfunded mandate. Possibly unmet mandate. Trying to have messages for every contingency requires more time and effort as well as more paper than many States and local jurisdictions can afford.	Workload/ resource burden Fast break accidents Public messaging		Agree. Supplement 3 provides recommendations to enhance the probability that the public will comply with PADs. No change.
275	8 38E8	Trying to write plans, procedures, and messages for all possible contingencies only piles more paper into present plans and procedures. Potential Impact: Emergency management and emergency response personnel will refuse to look at them or use them.	Workload/ resource burden Not constructive Public messaging	Page A-12,	Agree. Guidance should have stated that supplemental news bulletins should be enhanced to improve public compliance. Change in wording.
273	8 38E8	Trying to write plans, procedures, and messages for all possible contingencies only piles more paper into present plans and procedures. Potential Impact: Emergency management and emergency response personnel will refuse to look at them or use them.	Workload/ resource burden Not constructive		Agree. Supplement 3 does not suggest messages for all situations. Enhancement of emergency messaging will improve compliance with PADs. No change.
273A	30 52 34E30 40E30 38E30 44E30 52E30 56E30 58E30 61E30 42E30	Implementation: It is not clear to the reader or end user on how this document is to be implemented. The Protective Action Recommendation (PAR) Study is predicated on a hypothetical Emergency Planning Zone (EPZ) and subsequently presents Protective Action Strategy (PAS) guidance as if EPZs were homogenous. This is not the case for most EPZs in the country. How the various protective action strategies would be implemented for various population and evacuation time estimate (ETE) characteristics needs to be more clearly articulated. NEI proposes a more refined methodology that could better serve the user in the implementation of the document. This proposal is contained in Attachment 1, NEI Comment #1.	Implementation PAR Logic Diagram		Agree. The PAR Logic Diagram is based on the site ETE, and the differences in EPZs will be inherently accounted for upon development. However, the NRC would consider endorsing an industry template to standardize implementation. No change.

Comment #	ID	Comment	Keyword	Section/ Page	Adjudication
274A	30 34E30 40E30 38E30 44E30 52E30 56E30 58E30 61E30 42E30	Clarity of Terminology: Terminology used in the document is not clear. NEI commissioned three separate case studies. In each case study, a team of licensee and ORO partners used the guidance to develop a site-specific PAR logic diagram based on the example logic diagram and notes provided in the Supplement. Where implementation should have produced similar protective action results, three different protective action outcomes were developed. NEI believes that the proposed refined methodology discussed in Attachment 1, NEI Comment #1 is an approach that provides the clarity and guidance necessary to achieve a more consistent, systematic approach for PAS development. To further illustrate the benefit of the proposed refined approach to a PAS methodology (NEI Comment#1), NEI has included two marked-up versions of NRC's proposed logic diagram and corresponding notes to improve the definition of the terminology and usability of the proposed logic. The first mark-up of the logic diagram begins on page 18A of Attachment 2. Detailed discussion and basis for the markups appear in Attachment 1 starting on page 8, "Comment Area: Logic Diagram".	PAR development		Agree. There is not necessarily one "correct" PAR that should be determined. Finding three different PARs that all protect public health and safety may be appropriate. However, the NRC would consider endorsing an industry template to standardize implementation. No change.
275A	30 34E30 40E30 38E30 44E30 52E30 56E30 58E30 61E30 42E30	Rapidly Progressing Severe Accident: NEI believes there is no basis for including the left hand side of the PAR Logic Diagram in the proposed Supplement entitled, "Rapidly Progressing Severe Accident". This adds superfluous detail not supported by ongoing NRC studies on severe accidents. NEI recommends that this branch of the PAR Logic Diagram be removed. The basis for the removal of the rapidly progressing severe accident instruction is discussed in more detail in Attachment 1, NEI Comment #2. In the event that NRC does not agree to remove the rapidly progressing severe accident portion of the logic diagram, NEI is submitting a second mark-up of the proposed PAR Logic Diagram. The rapidly progressing severe accident portion of the PAR Logic Diagram is not usable as presented in the Supplement. A basis for this mark-up is provided in Attachment 1, NEI Comment #13.	PAR development		Disagree. The EP planning basis includes the LER. However, changes were made to the guidance to clarify use of the diagram. Change in wording.
276A	30 34E30 40E30 38E30 44E30 52E30 56E30 58E30 61E30	Wind Shift PAR: Information associated with PARs for wind shifts is contained in Section 4 of the proposed Supplement. Detail contained in this section is insufficient to appropriately inform licensees and OROs on the implementing guidance regarding wind shifts. NEI recommends a public meeting be conducted to develop adequate guidance. A more detailed discussion on the insufficiency of the guidance is presented in Attachment 1, NEI Comment #17.	Public outreach PAR development Implementation	Section 4	Agree. The wind shift option was included based on input from the Nuclear Energy Institute (NEI). It has been simplified and is optional for use where the licensee deems appropriate. The NRC and FEMA will hold joint implementation workshops, and NEI and the NRC routinely conduct informational meetings. Change in wording.

Comment #	ID	Comment	Keyword	Section/ Page	Adjudication
277A	30 34E30 40E30 38E30 44E30 52E30 56E30 58E30 61E30	Emergency Alerting and Instructions: Section 4 of the proposed Supplement introduces subject matter related to public information and is not within the scope of guidance and criteria for public protective actions for the general public. Therefore, NEI suggests removal of this section from the Supplement and relocate to a document intended to provide similar guidance to OROs such as the FEMA REP Program Manual. Supporting information related to this comment is contained in Attachment 1, NEI Comment #18. SOARCA: The findings associated with State of the Art Reactor Consequence Analysis (SOARCA) are materially important to the content of the proposed draft document. Because the issuance of the final SOARCA study is anticipated in the foreseeable future, the proposed Supplement should incorporate pertinent elements of the SOARCA. A detailed discussion on this topic is presented in Attachment 1, NEI Comment #28. Further, NEI is concerned that with the lack of participation by FEMA at the April 13, 2010 public meetings and that the draft Supplement 3 proposes guidance for offsite protective actions and public messaging that is not in concert with the draft proposed FEMA Radiological Emergency Preparedness Program Manual, ⁷⁴ Fed. Reg. 23,198 (May 18, 2009) (Docket ID FEMA-2008-0022) is indicative of a lack of collaboration with FEMA in the development of the proposed guidance that impacts ORO decision makers.	Public messaging	Section 4	Agree in part. Emergency messaging is critical to achieving public compliance with protective direction. However, the appendix has been deleted, and only key aspects of it brought into the main document. Change in wording.
278A	30 34E30 40E30 38E30 44E30 52E30 56E30 58E30 61E30 42E30		Document availability		Agree. The reference to SOARCA will be removed. Change in wording.
279A	35	[Provided a] suggested re-write of Section 4, Radiological Assessment Based PAR starting on page 12 of Supplement 3. The intent is to provide more specific guidance on what conditions should be considered before using a dose assessment based PAR in place of a Fission Product Barrier based PAR. In any case, a paragraph is suggested that discusses the expectation that the PAR development process should also be discussed and understood by EPZ Offsite Response Organizations and specific site characteristics should be considered in PAR procedure development.	PAR development	Section 4	Disagree. The proposal is overly complicated. The document communicates NRC expectations that judgment and current radiological information will be used for PAR upgrading. No change.
280A	41	There seems to be a conspicuous lack of commentary and dialogue of the issues by DHS/FEMA in this process; especially at the local level.	Coordination—FEMA/ NRC/State		Disagree. This is a joint NRC/FEMA document. The NRC held all public meetings jointly with FEMA. No change.

Comment #	ID	Comment	Keyword	Section/ Page	Adjudication
281A	41	I was fortunate to be able to participate in the NRC public meeting that was also held in Tampa on the evening of July 21st. I spoke publicly the NRC meeting about the term "heightened awareness". Government officials should endeavor to keep every protective action message/instruction as simple as possible. In that regard, "heightened awareness".... should always be a general standing order during an emergency; not a new protective action. Panicked people will know what those terms mean. "Heightened awareness" however, is a state of being which I believe would be best described by as an adjective. That's too confusing to be a protective action for panicked people during an emergency. I strongly recommend that the use of term "heightened awareness" be stricken as a new protective action.	Heightened preparedness		Agree in part. The term "heightened awareness" was deleted, and "monitoring and prepare" is used. Heightened awareness is not a standing order, nor should it be continually enforced by the ORO. People residing in EPZs should be allowed to live a normal life. Although education on emergency response is appropriate, continuous warning of the need to prepare is not effective. People do not "panic" during an emergency, but they do look for direction from authorities. Change in wording.
282A	41	With all due respect, as an emergency manager, I found that the use of hope as a concept in relationship to a critical NRC planning document to be somewhat disturbing. I've often heard the cliché that "hope is not a plan". I don't use the concept of hope in my professional planning and I would expect that neither would the NRC	Not constructive		Disagree. Supplement 3 does not reference the concept of hope. No change.
283A	41	I heard it stated by the NRC panel members that this is a guidance document, however I heard it stated by a senior utility operator that it's language is strikingly similar to regulatory compliance language. More needs to be done to rectify that differential.	Regulatory significance		Agree. This is a guidance document. Licensees may use a different method and submit it to the NRC for consideration. While OROs are encouraged to use the guidance, they remain responsible for protective action strategy. No change.
284A	41	Despite all the studies, I don't believe that staged evacuations will be achievable. That concept needs to be reconsidered.	Staged evacuation		Disagree. Staged evacuation has been widely used and will be effective if emergency messaging is sufficient. No change.
285A	52	SOARCA: Entergy strongly believes that the findings associated with the State of the Art Reactor Consequence Analysis (SOARCA) being performed for the NRC by the Sandia National Laboratory are materially important to the content of the proposed draft document. Because the issuance of the final SOARCA study is anticipated in the foreseeable future, the proposed Supplement should incorporate pertinent elements of the SOARCA. Entergy provides a more detailed discussion on SOARCA in Attachment 1, Comment #2.	Document availability		Disagree. SOARCA is neither published nor approved and will not be used for regulatory purposes. The reference to SOARCA will be removed. Change in wording.
286A	52	Wind Shift PAR: Information associated with PARs for wind shifts is contained in Section 4 of the proposed Supplement 3. Detail contained in this section is insufficient to appropriately inform licensees and Off-Site Response Organizations (OROs) on the implementing guidance regarding wind shifts. In addition, Entergy believes that screening criteria should be used by the licensee emergency response organization as a tool in determining when it is appropriate to use PARs based on dose assessment information in preference to PARs based on plant conditions. Entergy's comments on this subject are provided in Attachment 1, Comment #3.	PAR development	Section 4	Disagree. The wind shift option was included based on NEI input. It has been simplified and is optional for use where the licensee deems it appropriate. The proposed criteria for windshift PARs are overly complicated. The NRC has communicated its expectations regarding this issue. Change in wording.

Comment #	ID	Comment	Keyword	Section/ Page	Adjudication
287A	52	<p>Emergency Alerting and Instructions: The Appendix of the proposed Supplement 3 introduces subject matter related to public information and is not within the scope of guidance and criteria for public protective actions for the general public. Therefore, Energy recommends removal of this section from Supplement 3 and relocation of this information to a document intended to provide similar guidance to OROs such as the FEMA REP Program Manual. Energy provides discussion on the draft Supplement 3 Appendix in Attachment 1, Comment #7.</p>	Appendix		Agree in part. Some of the information will be deleted or placed in a separate document. Change in wording.
288A	47	<p>Draft Supplement 3 identifies a number of decision points in the process. EP Consulting recognizes that the generic flowchart was intended to be modified on a plant specific basis, but additional clarifications are required. Some of these decision points are event specific and must be reviewed in real time as part of the determination process. Other decision points are plant specific and can be answered on a one time basis for the site and the decision process simplified. The final decision points are intended to be resolved by industry interactions with the offsite partners. It is this third area that continues to cause conflicts to both utility and offsite partners. The parameters associated with these joint decisions are unclear in the current version. For these decision points, the extent of the allowable variations in the final outcome need to be better specified with respect to compliance.</p>	PAR Logic Diagram		Disagree. Licensees and OROs have a longstanding relationship for emergency response, and it is believed that they can work jointly on protective action strategies. Additional guidance from the NRC is unlikely to enhance working arrangements between licensees and OROs. No change.
289A	47	<p>The proposed NUREG presents proposed actions based on studies but does not provide conclusive numerical evidence of the dose benefit based on the proposed actions. (NUREG-6953 provides for "Significantly Improved Benefit, Improved Benefit, Baseline [not significantly different than baseline), Less Benefit, and Significantly Less Benefit". Due to the considerable uncertainties and assumptions involved in dose projections, if the studies do not show a truly "Significantly Improved Benefit," the present guidance should remain unchanged.</p>	NUREG/ CR-6953, Vol. I, II, and/or III		Disagree. As has been explained in many public meetings, the current guidance is being enhanced and made more site and scenario specific. The proposed strategy development process offers many advantages. No change.
290A	47	<p>The implementation guidance should establish whether licensees will be expected to provide a quantification of the dose benefit of its PAR strategies. If the strategies are dose neutral, the implementation guidance and or NUREG should provide the criteria for selecting one strategy over the other. As above, if the strategies are determined to be dose neutral, or not truly significant, consideration should be given to not requiring the change based on the perceived impact on public confidence.</p>	Implementation		Disagree. As has been explained in many public meetings, the current guidance is being enhanced and made more site and scenario specific. The proposed strategy development process offers many advantages. No change.

Comment #	ID	Comment	Keyword	Section/ Page	Adjudication
291A	47	<p>This draft NUREG involves a significant change in historical public actions in response to protective action decision making/recommendations. The high cost of the change management for this program, with an emphasis on the cost to “re-train” the local populace and Offsite Response Organizations (OROs) is not supported by a cost benefit analysis considering changing the concepts with respect to dose savings. The public confidence issue with respect to a change in what the public assumed for the last several decades was the “right thing to do” is a related issue more difficult to place a cost estimate on. Please provide a cost benefit analysis with respect to resulting dose savings from the proposed change.</p>	<p>Workload/ resource burden Public outreach</p>		<p>Disagree. The new system is not expected to cost more than the old system. No change.</p>
292A	47	<p>Supplement 3 uses Evacuation Time Estimate (ETE) data that is based on the proposed rulemaking rather than existing ETE requirements. Neither the implementation schedule for 0654 Supplement 3 nor the ongoing rulemaking is currently available. Additionally, the ongoing census has the potential to require further ETE modifications. All factors should be considered and a consistent and complete implementation schedule developed.</p>	<p>2010 Census/ ETE guidance</p>		<p>Agree. Implementation will await enhanced ETEs; 2010 Census data are now available. Supplement 3 and EP rulemaking efforts are being coordinated. No change.</p>
293A	47	<p>Emergency Preparedness stakeholders have been informed that, in addition to the ongoing EP rulemaking and revision to NUREG-0654 Supplement 3, NRC and FEMA have committed to revising NUREG-0654 in its entirety with significant future rulemaking anticipated. Piecemeal implementation of significant regulatory changes is neither efficient or improves public confidence in the industry or the regulatory organization. These complex regulatory changes should be coordinated to effectively update the regulations.</p>	<p>Final EP Rule</p>		<p>Agree. Supplement 3 and EP rulemaking efforts are being coordinated. However, the revision of NUREG-0654 will take several years and will have significant stakeholder input. No change.</p>
294A	47	<p>The findings associated with State of the Art Reactor Consequence Analysis (SOARCA) are materially important to the content of the proposed draft document. Because the issuance of the final SOARCA study is anticipated in the foreseeable future, the proposed Supplement should be delayed and incorporate pertinent elements of the SOARCA.</p>	<p>Document availability</p>		<p>Disagree. SOARCA is neither published nor approved and will not be used for regulatory purposes. The reference to SOARCA will be removed. Change in wording.</p>
295A	42	<p>This seems to direct that each site should have a customized PAR logic diagram. While I would encourage that approach it does raise the question as to whether an industry that is fanatical about standardization is going to willingly embrace a concept that would require following different PAR logic diagrams based on the OROs they are dealing with.</p>	<p>PAR Logic Diagram</p>		<p>Agree. The NRC believes that site-specific PAR logic with ORO input is appropriate and may vary from site to site. No change.</p>

Comment #	ID	Comment	Keyword	Section/ Page	Adjudication
296A	42	Page 2 provides a synopsis of the PAR Study results. I have serious doubts about the overall accuracy of responses given by those surveyed in the no stress, non-emergency environment of a comfortably seated focus group or answering a series of questions over the telephone while relaxing at home.	NUREG/CR-6953, Vol. I, II, and/or III	Page 2	Agree. The survey is just a data point and is not considered to exactly reflect response. However, it is the only data point available and can be used to inform the process. Response will depend more on the efficacy of ORO protective action direction and emergency messaging. Guidance is provided to improve those areas. No change.
297A	42	Point 1 – I agree that radial evacuation should remain the primary protective action.	PAR development		Agree. No change.
298A	42	Point 2 – Sheltering-in-place does not need to receive more emphasis. We already consider it when there is a possibility that putting the public in motion would be more dangerous than remaining.	Shelter in place		Disagree. SIP should also be considered for rapidly developing accidents. If an ORO already does so, then the change will be minimal. No change.
299A	42	Point 3 – Staged evacuations are worth a look, but I suspect they sound better on paper than what would actually happen in reality. In Pennsylvania we have the necessary TCPs designated and the resources in place to man them to enable the entire EPZ to evacuate simultaneously. Our ETEs are based on the entire EPZ leaving at once. I hold that it would be impossible to successfully have the rest of the EPZ stay put while the 0-2 mile population evacuates past them	Staged evacuation 2010 Census/ ETE guidance		Disagree. Staged evacuation is widely used. An immediate total EPZ evacuation increases risk to those closest to the plant and is not a more protective strategy. No change.

Comment #	ID	Comment	Keyword	Section/ Page	Adjudication
300A	42	Point 4 – This is a great idea that should have been stressed years ago. There is no reason schools and parks cannot be closed at SAE and it makes emergency management sense to do so. Like an early snow dismissal this is not particularly disruptive and parents know exactly where their children have gone.	School/pets/ special needs Positive!		Agree. Many sites already do this. However, other comments indicated that guidance in this area is not needed. No change.
301A	42	Point 6 – This also highlights an area that needs more emphasis. Prisons, hospitals, and care facilities for the non-ambulatory or severely disabled need more planning emphasis. They require enormous resources that simply will not be available initially. The solution may be to attempt to harden these facilities for sheltering versus attempting to evacuate them.	School/pets/ special needs		Disagree. The NRC believes the level of planning for special facilities is adequate. The issue that should be emphasized is planning for special needs individuals who are not in special facilities. No change.
302A	42	The paragraph on page 3 of this document states that it is “Federal guidance” but later states that it will also be used to aid in determining compliance with 10 CFR 50.47(b)(10). This may be legal semantics, but it seems that anything that is used to determine compliance falls more in the realm of regulation instead of guidance	Regulatory significance	Page 3	Disagree. Federal guidance provides methodology that can be used in achieving compliance; however, there is no requirement that this guidance must be used to do so. Other methods may be submitted for consideration. Change in wording.
303A	42	Page 4, paragraph 2 seems to recommend that the licensee confer with the ORO concerning the PAR, provided it does not delay the 15-minute PAR deadline the licensee must meet. This is a moot point that really does not require guidance	PAR development	Page 4	Disagree. Conferring by the shift staff is not recommended and is intended for strategy development planning only. The augmented ERO may have resources and time to confer. No change.

Comment #	ID	Comment	Keyword	Section/ Page	Adjudication
304A	42	Page 6, paragraph 2 mentions using a 90 percent ETE to develop a PAR. I cannot speak for other states, but our ETEs have been developed on the premise of evacuating 100 percent of the population. I don't know where the 90 percent figure came from. Our ETEs don't even provide a 90 percent estimate and why should they? It would be baffling, not to mention highly inaccurate, to make a 90 percent estimate based on what is originally just an estimate for 100 percent of the population.	2010 Census/ ETE guidance	Page 6	Agree. The 90-percent ETE is based on the time it will take the majority of the population to evacuate. Studies have shown that there is a tail end of the population that chooses not to evacuate or evacuates late; this group will artificially make ETEs longer than they essentially are. This is, therefore, a more accurate methodology. ETEs will be required to develop this information, and planning for 100 percent should continue. No change.
305A	42	Page 7, paragraph 2.4 states that a wind persistence analysis may not be used to justify a default PAR to evacuate 360 degrees. Pennsylvania already uses a form of wind persistence analysis to justify our automatic decision to evacuate 0-10 miles, 360 degrees. Based on this predetermined state policy any PAR provided by the licensee that is less than that is merely an academic exercise on their part.	PAR development	Page 7	Disagree. A licensee must issue an accurate and well-reasoned PAR based on knowledge of plant conditions and dose assessments, regardless of its State's policy. Unnecessary evacuation of areas is not protective of public health and safety as it delays the evacuation of those most at risk. No change.
306A	42	The page 13 definition of Evacuation Time Estimate needs clarification if you are going to stick with the 90 percent idea posited on page 6.	2010 Census/ ETE guidance	Page 13	Disagree. This is a common term of the trade. No change.
307A	42	If the PAR Logic Diagram on page 17 has to be used it must be simplified. The diagram is so complicated that it is even comes with three full pages of detailed notes that attempt to explain how to use it. It would be amazing if a licensee would even stand a chance of developing and transmitting a PAR within 15-minutes using such a complicated and wordy maze to reach a decision. Frankly we have encountered no major issues with the PAR logic diagrams currently being used by the licensees in the state and fail to see how complicating the issue for them further is going to provide any benefit. We would be much more interested in a PAR logic diagram that led to the only three responses currently used in this state: do nothing, shelter, or evacuate 0-10 miles, 360 degrees. Anything else merely serves to add confusion.	PAR Logic Diagram	Page 17	Disagree. Much of the PAR Logic Diagram and notes will be simplified once site-specific conditions are applied. Unnecessary evacuation of areas is not protective of public health and safety as it delays the evacuation of those most at risk. No change.
308A	42	Note 1 on page 18 and in other places once again raises the unwillingness on the part of our federal partners to let the "fast breaker" issue die.	PAR Logic Diagram	Page 18	Agree. It is part of the EP planning basis. No change.
309A	42	Note 2 on page 18 and note 8 on page 19 stresses that the utility should base their PAR on impediments to evacuation that the OROs have identified. Again, it would be preferable that the utility base their PAR on their own on-site equipment status and radiological projections. The OROs will factor in evacuation impediments along with other considerations as we develop our PADS. There seems to be a misconception on the part of our federal partners that the OROs just blindly accept the utility PAR and convert it word for word into a PAD. Nothing could be further from the truth. We will handle issues outside of the fence – let the licensee concentrate on what is going on inside the fence.	PAR Logic Diagram		Agree. The ORO may relieve the licensee of that consideration. No change.

Comment #	ID	Comment	Keyword	Section/ Page	Adjudication
310A	42	Note 5 on page 19 defines a concept called "heightened preparedness" that has now suddenly become an official protective action. I fail to see the purpose of adding a new term to the program when it seems to provide no improvements. It is unclear who came up with this idea or why.	PAR Logic Diagram Heightened preparedness	Page 19	Disagree. It is important to provide direction to the public not under an SIP or evacuation order to prepare should it become necessary and to minimize shadow evacuation to allow those closest to the plant to evacuate rapidly. However, the term was changed. Change in wording.
311A	42	Nowhere in the PAR Logic Diagram or the attached notes is there any mention of what to do if the OROs have already decided to expand on the licensee PAR and initially evacuate the entire 10-mile EPZ. If that occurs, which it does frequently in this state, what purpose, besides an academic exercise, is served by putting the licensee through further PAR discussions and 15-minute deadlines?	PAR development		Agree. However, the licensee is expected to provide the best technical information available regardless of decisions made by OROs, who remain responsible for PADs. No change.
312A	42	Reference notes 6 and 7; I pity the mathematical wizard that has to figure out the algebra involved with these two instructions within the 15-minute timeframe.	Not constructive		Disagree. This is not meant to be determined within the 15-minute timeframe. This should be planned well in advance. No change.
313A	42	Point 4 on page A-6 mentions that public information brochures should contain information to limit shadow evacuations. This is not germane in a state that automatically evacuates the entire EPZ.	PAR Logic Diagram Public messaging Shadow evacuation	Page 4, A-6	Disagree. The guidance is intended for nationwide use. No change.
314A	42	Paragraph 3.1 on page A-7 alludes to making "heightened preparedness" a protective action. It needs to go away. We have already prepared to raise public awareness in the event of a disaster.	Heightened preparedness	Appendix page A-7	Disagree. It is important to provide direction to the public not under an SIP or evacuation order to prepare should it become necessary and to minimize shadow evacuation to allow those closest to the plant to evacuate rapidly. However, the term was changed. Change in wording.
315A	42	There is a difference to providing public information in a colorful brochure that people may actually read versus trying to cram so much information into a brochure that people simply ignore it. The three points at the top of page A-8 are just three examples of futilely trying to cover every possibility that a group of fertile, but idle minds can come up with. There are uncountable studies that show the key to getting something read is to keep it visually pleasing and as simple as allowable to get the basic messages across	Not constructive		Agree. Supplement 3 was revised to condense guidance to the most critical items. Change in wording.
316A	42	Paragraph 3.5 on page A-9 is a further example of continuing to add information to a brochure until it passes the point where the target audience becomes disinterested in reading it because of its size.	Public messaging	Appendix, page A-9	Agree. Supplement 3 was revised to condense guidance to the most critical items. Change in wording.
317A	42	One concern about the efficacy of a preferential shelter option would be what becomes of evacuees' cars. It is hard to believe the evacuating public will be amenable at all to losing their personnel transportation for any length of time.	Preferential sheltering		Agree. Preferential sheltering has been removed from Supplement 3. Change in wording.
318A	42	It is unfortunate that this new guidance document on utility PARs for General Emergency did not also address the unique considerations that will be necessary for special facilities that would be extremely difficult and time consuming to evacuate. These would include large penal institutions like state and federal prisons and long-term care facilities that provide services for non-ambulatory, severely dependent individuals.	School/pets/ special needs		Disagree. The NRC believes that existing guidance is adequate for special facilities. No change.

Comment #	ID	Comment	Keyword	Section/ Page	Adjudication
319A	42	Finally, in spite of the criticisms this document is a welcome change and a breath of fresh thinking. Instead of remaining endlessly stuck in a 1979, post-TMI mindset it is refreshing to see a document that offers new ideas and ways of coping with a nuclear power plant incident.	Positive! PAR Logic Diagram		Agree. Thanks! No change.
320A	46	PAR Study Concerns: 1. Based on a hypothetical site; 2. Phone surveys may not be applicable everywhere; 3. State, county, local, and tribal decision making may vary greatly depending on what organization is responsible	NUREG/ CR-6953, Vol. I, II, and/or III		Disagree. The PAR Study only informed the process. Site-specific elements will be included in the protective action strategy. No change.
321A	46	NUREG 6953: Makes general assumptions regarding uniform population distribution and density; the applicability of the guidance is limited to the extent to which the site specific conditions correspond to the hypothetical site in the model. The straight-line Gaussian model used in the MACCS2 program for consequence calculations that form the technical basis behind the new Supp3 is outdated and does not reflect the current understanding of atmospheric transport and dispersion as referenced in the NRC's current dose assessment program RASCAL.	NUREG/ CR-6953, Vol. I, II, and/or III		Disagree. The PAR Study only informed the process. Site-specific elements will be included in the protective action strategy. No change.
322A	46		Dose assessment models		Disagree. The PAR Study only informed the process. Site-specific dose models may be used to develop the protective action strategy. No change.
323A	46	SOARCA.	Document availability		Agree. The reference to SOARCA will be removed. Change in wording.
324A	46	In Public Meetings NRC indicated that a rapidly progressing severe accident would be "self revealing". Vol 3 of the PAR study does not provide any details of the accident sequence or source term that would constitute a rapidly progressing severe accident nor would the NRC provide any further details when questioned.	NUREG/ CR-6953 Vol. I, II, and/or III		Agree. If the accident is not self-revealing, it should be assumed that it is not happening. No change.
325A	46	There has been minimal DHS/ FEMA involvement in this process that we can see from a stakeholder perspective.	Coordination—FEMA/NRC/State		Disagree. This is a joint NRC/FEMA document. Public meetings were held jointly with FEMA. No change.
326A	46	It would be prudent to issue Supp3 for comment after the final rule and guidance on EP planning is issued (as well as ETE Guidance). The section discusses expanding PARs beyond five miles or upgrading PARs based on changing wind directions. The discussion focuses mainly on application of dose projections for expanding or upgrading PARs. Basing changes to PARs solely on dose projections is a mistake.	2010 Census/ ETE guidance Final EP Rule		Disagree. Supplement 3 was issued for comment, and over 300 comments were collected and considered. No change.
327A	46		PAR development	Section 4	Agree. Supplement 3 does not assert that PARs should be based solely on dose projections alone. No change.
328A	46	Heightened preparedness is not a protective action and has not been a term used historically in nuclear emergency preparedness.	PAR development		Disagree. It is important to provide direction to the public not under an SIP or evacuation order to prepare should it become necessary and to minimize shadow evacuation to allow those closest to the plant to evacuate rapidly. However the term "heightened awareness" was deleted, and "monitoring and prepare" is used. Change in wording.

Comment #	ID	Comment	Keyword	Section/ Page	Adjudication
329A	46	Appendix does not belong with Supp3.	Appendix		Agree in part. Some of the information will be deleted or placed in a separate document. Change in wording.
330A	46	"This update to Supplement 3... supersedes previous guidance on the development of PAR logic for nuclear power plant accidents." This statement should be modified to indicate that it only supersedes previous NRC guidance.	Editorial/ Verbiage	Abstract, page iii	Agree. Change in wording.
331A	46	This guidance document does not address the possibility that the licensee and ORO may not reach an agreement consistent with the methodology outlined in Supplement 3. There will be a great degree of variability in the construct of the site specific PAR logic diagram.	PAR development		Disagree. The document states that in this case, the relevant plans can be used to determine the criteria. However, these entities have been preparing together for many years and have established relationships for doing so. No change.
332A	46	Supp3 changes the philosophy of the logic used for making protective action recommendations. The current version does not provide the option for shelter-in-place in the development of protective actions except where impediments to evacuation exist or in the case of a release of a known short duration. State and local officials will have the daunting task of re-educating decision makers and the public on protective actions for nuclear power plants. To accomplish this it is critical that the NRC be involved in the implementation of the guidance along with state, local and onsite staff.	Implementation 2010 Census/ ETE guidance		Agree. The NRC and FEMA will hold implementation workshops. No change.
333A	46	Census data collection and development of new ETEs need to be considered in developing a schedule for implementation.	Implementation		Agree. No change.
334A	46	Going forward with the revision of NUREG-0654, NRC and FEMA should be mindful of the changes already made to FEMA and NRC guidance so that they remain consistent.	Final EP Rule		Agree. No change.
335A	46	Final implementation of Supplement 3 requires the use of site specific ETEs. Specifically, the 90% ETE required to implement the guidance may not be available for all nuclear power plant sites in their current ETEs.	2010 Census/ ETE guidance		Agree. No change.
336A	46	The NRC has chosen to include guidance in this document that requires the utility to consider offsite impediments that were formally the jurisdiction of OROs and FEMA.	ORO vs. licensee responsibility		Agree. The ORO can relieve the licensee of this responsibility. No change.
337A	46	Some state plans use Emergency Planning Areas that do not include 2 mile areas. The guidance needs to be clarified to reference ETEs to the preplanned subareas that are actually evacuated and not an imaginary 2 mile circle.	Staged evacuation 2010 Census/ ETE guidance		Agree. This is exactly the intent of the guidance. No change.

Comment #	ID	Comment	Keyword	Section/ Page	Adjudication
338A	46	A one hour time period should not be prescribed for discussions between the licensee and OROs on whether or not the sheltering PAR for hostile action event should be changed .	Shelter in place		Agree. Change in wording.
339A	46	It is not clear in the document nor from the public meetings how the NRC and FEMA will evaluate PAR logic diagrams during exercises. Stakeholders expect that NRC and FEMA should clearly state how site specific PAR diagrams will be reviewed and approved.	PAR Logic Diagram 2010 Census/ ETE guidance Implementation		Agree. Implementation meetings are planned to discuss these types of issues. No change.
340A	46	With the new census data underway it would be efficacious for all parties to delay implementation of this provision to avoid unnecessary duplication of efforts and resources. For states that have more than one nuclear power plant site, evacuation may be the preferred strategy at one site while shelter may be the preferred strategy at another site. What does the NRC recommend for such instances? Does the NRC intend to provide support to state and local government to explain the radically difference actions taken in response to the exact same event?			Agree. The 2010 Census data are now available. No change.
341A	46		PAR development		Agree. The guidance is intended to be site specific, and differences may be appropriate. Implementation meetings are planned. No change.
342A	46	It is critical that both NRC and FEAM put measures in place to ensure that the final guidance is consistently applied across the country. The implementation of the final guidance cannot vary according to the interpretation of regional NRC or FEMA staff.	Implementation		Agree. The NRC and FEMA will be holding a series of implementation workshops to help with this issue. No change.

3.0 Analysis

The NRC staff developed a comment analysis process to gain in-depth analytical insight into the composition and nature of stakeholder feedback. This section describes the analysis process developed, as well as the results of this analysis. While this analysis helped to inform the adjudication process, all comments were responded to individually and based on technical merit alone (see Results section).

3.1 Data Collection and Organization

To compare different sets of comments, the NRC developed a tracking method to normalize the comments into comparable bites of information. This report designates every submission by a truncated version of the docket number assigned by www.regulations.gov. The report refers to this number simply as the commenter's "ID." Each submission was divided into individual thoughts. Each of these thoughts is referred to as a "comment," and the NRC staff assigned each individual comment a "comment ID." Thus, each *commenter* has an ID, and each *comment* made has a comment ID. To view comments in their entirety, refer to the Results section. Table 1 provides a list of all commenters, docket numbers, and IDs.

Table 1 Commenter IDs

Commenter	Docket Number	ID
Marsh USA, Incorporated	NRC-2010-0080-0005	5
Tennessee Emergency Management Agency	NRC-2010-0080-0006	6
Stephen Payne	NRC-2010-0080-0007	7
Nebraska Emergency Management Agency	NRC-2010-0080-0008	8
State of New Jersey, Department of Environmental Protection (Jill Lipoti)	NRC-2010-0080-0010	10
State of New Jersey, Department of Environmental Protection (Patrick Mulligan)	NRC-2010-0080-0011	11
Conference of Radiation Control Program Directors	NRC-2010-0080-0012	12
Pennsylvania Department of Emergency Protection, Bureau of Radiation Protection	NRC-2010-0080-0016	16
Inter-jurisdictional Planning Committee	NRC-2010-0080-0017	17
Illinois Emergency Management Agency	NRC-2010-0080- 0020	20
Minnesota Department of Public Safety	NRC-2010-0080-0022	22
Geauga County Board of Commissioners	NRC-2010-0080-0023	23
Ashtabula County Emergency Management Agency	NRC-2010-0080-0024	24
State of Washington Military Department, Emergency Management Division	NRC-2010-0080-0025	25
Lake County, Emergency Management Agency	NRC-2010-0080-0027	27
North Carolina Division of Emergency Management	NRC-2010-0080-0029	29
Nuclear Energy Institute	NRC-2010-0080-0030	30
The Ohio Emergency Management Agency	NRC-2010-0080-0032	32
Omaha Public Power District	NRC-2010-0080-0033	33
NextEra Energy	NRC-2010-0080-0034	34
PSEG Nuclear LLC	NRC-2010-0080-0035	35
Entergy Indian Point Energy Center	NRC-2010-0080-0037	37
State of Louisiana	NRC-2010-0080-0038	38
Harford County, Maryland, Emergency Operations	NRC-2010-0080-0039	39
Constellation Energy Group	NRC-2010-0080-0040	40
KLD Associates, Inc.	NRC-2010-0080-0041	41
Pennsylvania Emergency Management Agency (Douglas Fleck)	NRC-2010-0080-0042	42
Delaware Emergency Management Agency	NRC-2010-0080-0043	43
Duke Energy	NRC-2010-0080-0044	44
Conference of Radiation Control Program Directors	NRC-2010-0080-0012	46
EP Consulting	NRC-2010-0080-0047	47
State of New York, Department of Health	NRC-2010-0080-0048	48
Maricopa County Department of Emergency Management	NRC-2010-0080-0050	50
Palm Beach County Division of Emergency Management—REP Program	NRC-2010-0080-0051	51
Entergy	NRC-2010-0080-0052	52
Strategic Teaming and Resource Sharing (STARS)	NRC-2010-0080-0053	53
Alabama Emergency Management Agency	NRC-2010-0080-0054	54
Illinois Emergency Management Agency	NRC-2010-0080-0055	55
Progress Energy	NRC-2010-0080-0056	56
Office of Emergency Management, Monroe County, New York	NRC-2010-0080-0057	57

Missouri Emergency Management Agency	NRC-2010-0080-0058	58
Pennsylvania Emergency Management Agency	NRC-2010-0080-0059	59
Wisconsin Emergency Management	NRC-2010-0080-0060	60
Exelon	NRC-2010-0080-0061	61

Typically, comments were submitted in Word or PDF files and generally were organized in a series of bullets. The NRC staff extracted each bulleted comment and placed it individually into a spreadsheet. The staff recorded general information in the spreadsheet for each individual comment and later used the information to analyze the makeup of the total set of comments. General information includes the comment ID, docket number, docket ID, document section (if applicable), comment answer, keywords, and keyword categories (see Keyword Analysis section). This spreadsheet is referred to in this report as the *normalized spreadsheet*, to reflect the presentation of all comments in this spreadsheet in a consistent, statistically comparable format. This allowed each bulleted comment to be individually analyzed, studied, and answered. For commenters who did not present their comments in bullet formats, the staff divided their comments into individual thoughts. A few commenters used formats that were not conducive to this reporting style or were too long to fit in the spreadsheet. These comments were summarized into digestible bullets and placed into the normalized spreadsheet; the comment number for these summarized comments is followed by the letter ‘A’. One commenter provided proposed versions of Supplement 3 that could not be analyzed in the manner described. However, that commenter also provided discrete comments that are included in the analysis. It should be emphasized that, in adjudicating these comments, the NRC considered the entirety of any summarized entries; the summarized comments were used only for analysis purposes.

In addition to providing individual comments, some commenters chose to endorse another organization’s set of comments. To account for this, endorsed comments were weighted to reflect the number of endorsements. Endorsement designations in the normalized spreadsheet were provided in the format $[X E Y]$. This formula translates to “organization X endorses the comment provided by organization Y.” See the Results section (comment ID column) for all comment endorsements.

After all comments were collected and entered into the spreadsheet individually, keywords were assigned. Next, the NRC adjudicated the comments and provided an answer for every comment within the spreadsheet. Then a statistical analysis was conducted on the final set of data (see the Results and Analysis sections). The Results section shows the final, normalized spreadsheet.

3.2 Keyword Identification

Keywords were identified in an iterative process that began with broad category assignments, referred to as *keyword categories*. The benefit of beginning with such a coarse grid is that it allows for the large number of comments to be divided into smaller groupings where patterns can be more easily identified. Table 2 presents the broad keyword categories that were initially identified.

Table 2 Keyword Categories Reflecting the First Binning Iteration

Keyword Category
Implementation
Evacuations
Protective Actions
Coordination/ Communication
Documents

Then the binned comments were refined into finer analysis points, in the form of keywords; up to three keywords were assigned to every individual comment. Table 3 presents the keywords identified in each keyword category. Note that certain keywords are counted in multiple keyword categories. These issues, discussed in the Results section of this report, are referred to as *cross-cutting keywords*.

Table 3 Keyword Binning

Implementation	Document availability/SOARCA
	Coordination—FEMA/NRC/State
	2010 Census/ETE guidance
	Implementation
	Regulatory significance
	School/pets/special needs
	Workload/resource burden
	Final EP Rule
Evacuations	ORO vs. licensee responsibility
	Shelter in place
	Staged evacuation
	Precautionary protective actions
	Heightened preparedness
	School/pets/special needs
	Shadow evacuation
	Lateral evacuations
	Preferential sheltering
Protective Actions	PAR Logic Diagram
	Meteorology
	Fast break accidents
	Dose assessment models
	PAR development
Coordination/ Communication	Coordination—FEMA/NRC/State
	Public messaging
	ORO vs. licensee responsibility
	EAS messages
	Public outreach
Documents/ Editorial	Document availability
	2010 Census/ETE guidance
	Appendix
	Final EP Rule
	NUREG/CR-6953, Vol. I, II, and/or III
	Editorial/verbiage
	Not constructive
	Positive!

This section discusses the results of the keyword data analysis. For the adjudication of specific comments, refer to the Results section; for the discussion of how these comments affected the final Supplement 3 document, refer to the Analysis section of this report. A total of 353 individual comments were formally submitted to the NRC by 38 different organizations, groups, or individuals. The keywords assigned to each comment have been analyzed in a frequency and percent format.

3.3 Comment Breakdown: Summary

The comment binning techniques described in this and previous sections will result in three types of comment totals, or *counts*. It is important to distinguish between these totals because, depending on the calculation being performed, a different count is used as the denominator in frequency calculations. Comment totals for the Supplement 3 dataset include an *initial comment count*, a *weighted comment count*, and a *keyword count*. The *initial comment count* is the total number of individual remarks and summarized remarks submitted to www.regulations.gov. It is literally a one-by-one count of submitted comments. Next, the weighted count applies a weighting factor to endorsed comments. The Frequency Calculation and Cross-Cutting Issues section of this report describes in detail the mathematical process used to weight endorsements. Finally, the *keyword count* is the total number of all keywords assigned to the entire set, including weighted comments; because up to three keywords have been assigned to each comment, this results in the largest count taken. Table 4 summarizes these metrics for the comments received on Supplement 3.

Table 4 Keyword Counts

Count	Total
Initial comment count	353
Weighted comment count	510
Keyword count	736

3.4 Frequency Calculation and Cross-Cutting Issues

Keyword frequencies and percentages reported in this section were calculated as follows:

$$f_k = \frac{k}{total}$$

$$\% = f_k \times 100$$

Where f_k is the frequency of occurrence of a specific keyword; k is the number of comments assigned a given keyword; and $total$ is the total number of comments received, including endorsed comments. Comments that were endorsed were weighted to reflect the number of times they were endorsed. For instance, if four different organizations endorsed a particular

comment, then that comment was counted five times ($k = 5$). Including the weighting factor for endorsed comments, there is a total of 510 comments.

Note that the percentages reported below will generally add to over 100 percent. This is because many comments applied to multiple keywords or keyword categories. Since the purpose of this analysis is to determine the percentage of comments that pertain to a particular issue, this is an acceptable, and expected, mathematical result. Those keywords that are identified in multiple different keyword categories are considered to be cross-cutting issues. These issues are considered significant because they impact many facets and areas considered significant by commenters. Refer to Table 5 below.

Table 5 Cross-Cutting Keywords

Cross-Cutting Keywords:
Document availability
Coordination—FEMA/NRC/State
2010 Census/ETE guidance
School/pets/special needs
Final EP Rule
ORO vs. licensee responsibility

3.5 Keyword Category Results

Keyword categories reflect the initial iteration and broad binning. All 510 comments were placed in one of these bins. Recall that percentages will not add to 100 because of cross-cutting issues identified in Table 5. The results reported in Figure 1 indicate that the highest percentage of comments (34.4 percent) reflects implementation concerns. This is an important finding and may reflect the stakeholders' current budgetary constraints, but the NRC and FEMA recognize it as an overarching concern. Another noteworthy point is that the keyword categories of protective action development, evacuations, and documents/editorial all attracted approximately equal levels of stakeholder interest (approximately 25 percent each). Coordination/communication is also a significant concern but of lower priority to stakeholders than the other keyword categories.

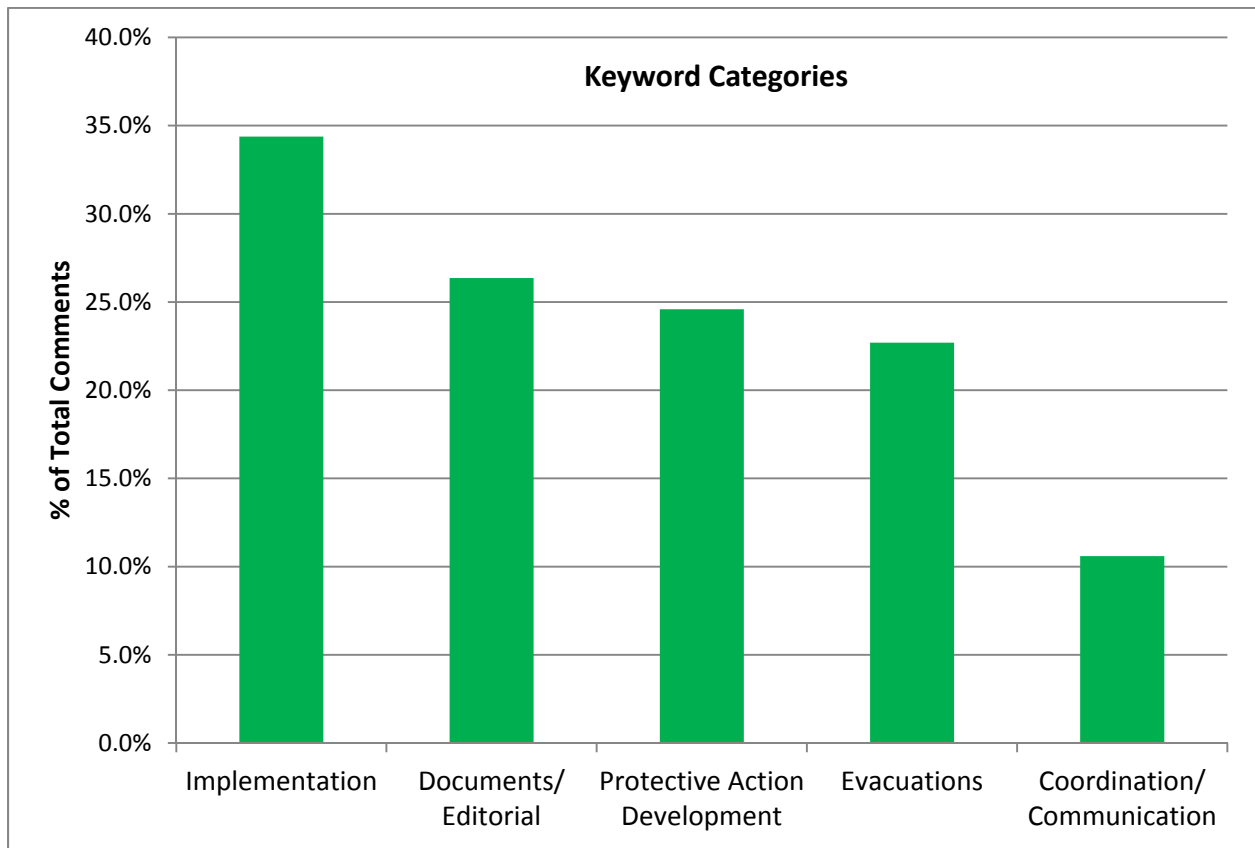


Figure 1 Keyword categories reflecting the first iteration and binning process for all comments

Table 6 reports the above results in tabular format. These results reflect broad binning categories and reflect the overall concerns raised by stakeholders. The next section, Keyword Results, describes the categorization of these broad concerns into the more refined data points, referred to in this study as keywords, and the results of their analysis.

Table 6 Keyword Categories

Keyword Category	Percent	Total
Implementation	34.4%	253
Documents/Editorial	26.4%	194
Protective Action Development	24.6%	181
Evacuations	22.7%	167
Coordination/Communication	10.6%	78

3.6 Keyword Results

Since a single comment may have as many as three keywords, this provides a significant and varied data source which reflects the complex comments collected. Analysis of the keyword data was conducted by calculating frequencies of keywords relative to all keywords assigned, and a total of 736 different keywords were assigned. Figure 2 reports the 10 keywords occurring most often in comments, and Table 7 presents the percentage results for all keywords in tabular format.

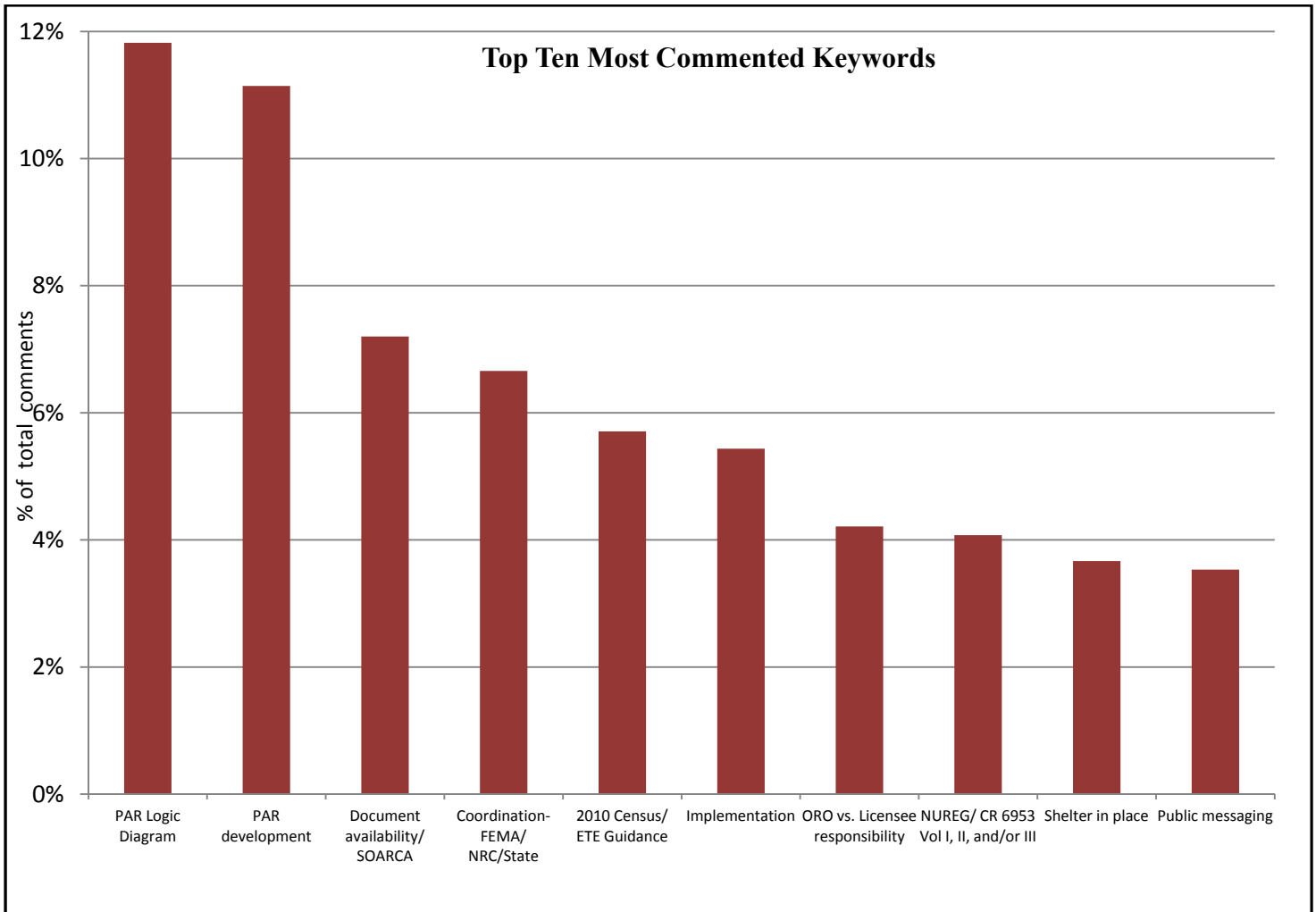


Figure 2 Keyword results

Table 7 Keyword Results

Keyword	Percent Total	Total Keywords
PAR Logic Diagram	11.8%	87
PAR development	11.1%	82
Document availability	7.2%	53
Coordination—FEMA/NRC/State	6.7%	49
2010 Census/ETE Guidance	5.7%	42
Implementation	5.4%	40
ORO vs. licensee responsibility	4.2%	31
NUREG/CR-6953, Vol. I, II, and/or III	4.1%	30
Shelter in place	3.7%	27
Public messaging	3.5%	26
Staged evacuation	3.5%	26
Regulatory significance	3.4%	25
Public outreach	3.3%	24
Precautionary protective actions	3.1%	23
Editorial/Verbiage	2.7%	20
Heightened Preparedness	2.7%	20
School/pets/special needs	2.7%	20
Appendix	2.4%	18
Workload/resource burden	2.4%	18
EAS messages	1.9%	14
Final EP Rule	0.8%	6
Meteorology	0.8%	6
Shadow evacuation	0.7%	5
Fast break accidents	0.5%	4
Lateral evacuations	0.5%	4
Preferential sheltering	0.4%	3
Dose assessment models	0.3%	2
Not constructive	3.8%	28
Positive!	0.4%	3
TOTAL	100.0%	736

3.7 Position Results

In addition to analyzing the composition of the comments themselves, the NRC staff also analyzed the composition of the answers to the comments. The results are reported in Table 8. It should be emphasized however, that agreement with a comment did not necessarily result in a change to Supplement 3.

Table 8 Adjudication Results

	Comments	Percent
Agree	279	54.7%
Disagree	231	45.3%
Total	510	

3.8 Commenter Composition

In another secondary study, the NRC staff examined the composition of those stakeholders who commented. This information allows the NRC and FEMA to better understand the context of concerns. It should be noted that the Nuclear Energy Institute (NEI) provided the most feedback to the NRC regarding Supplement 3. However, the form of NEI’s comments was not conducive to this study, and the staff had to summarize the NEI comments for analysis purposes. This is certainly a drawback of this type of analysis and something for which the analysis needs to account. However, aside from NEI, the State of New York, Department of Health, provided the most individual, stand-alone comments of any commenter. Based on Figure 3, the type of stakeholder who made the most comments was State emergency management agencies.

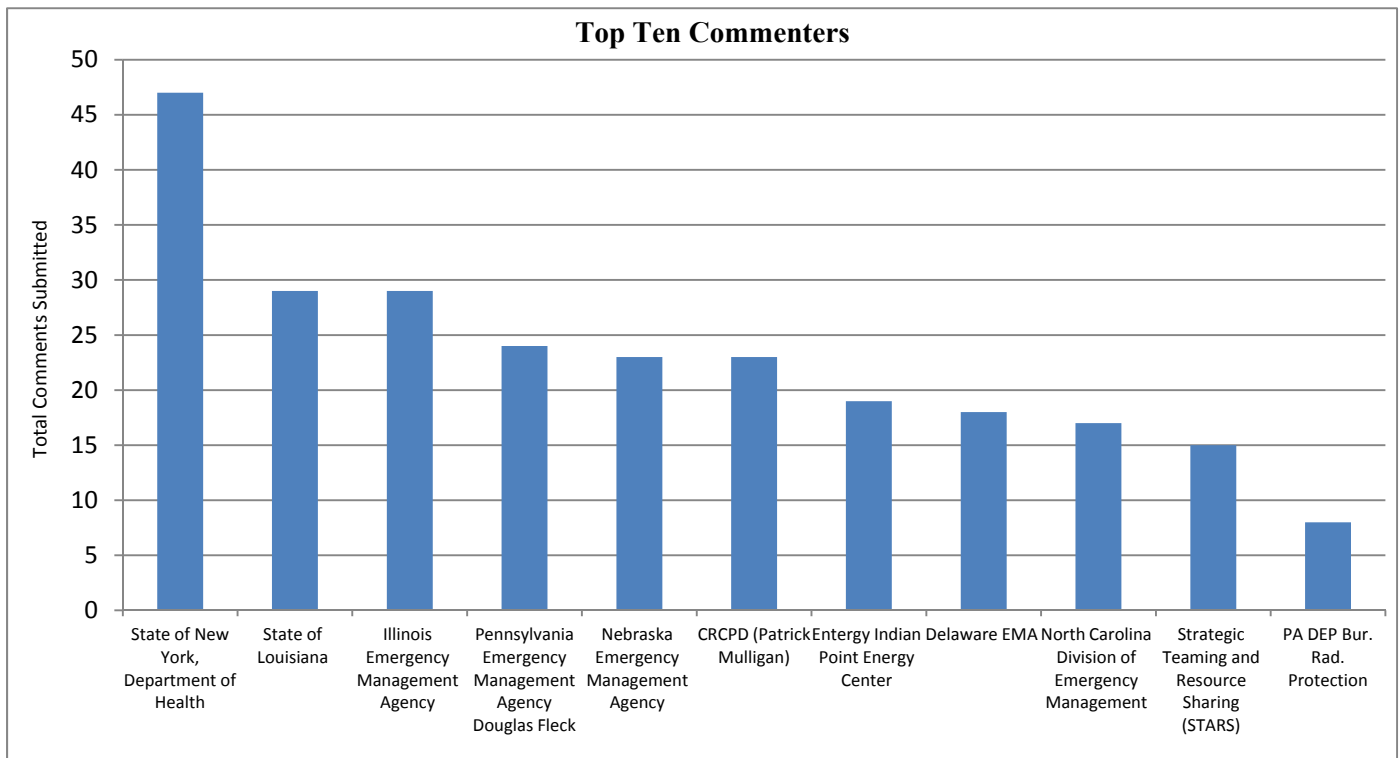


Figure 3 Top commenters

Also investigated were those stakeholders who endorsed and were endorsed by other commenters. Table 9 characterizes all endorsed comments; Table 10 summarizes the key properties identified. This information provided input as to which types of organizations agreed with one another most frequently. Similar to the cross-cutting keywords, the nature of the endorsements indicates that diverse commenters agreed with one another. For instance, the NEI was by far the group most endorsed by all types of commenters. NEI received endorsements from State and local emergency management agencies, licensees, and industry representatives. Also, many of the endorsements reflected geographical associations. For instance, the Office of Emergency Management, Monroe County, New York, endorsed the State of New York, Department of Health. This is a logical association. Thus, the nature of endorsements provides key information as to how globally an issue is represented amongst stakeholders.

Table 9 Total Endorsed Comments

Endorser	Endorsed	Number of Comments Endorsed
Office of Emergency Management, Monroe County, New York	State of New York, Department of Health	47
State of Louisiana	Nebraska Emergency Management Agency	21
Next Era Energy	Nuclear Energy Institute	6
Constellation Energy Group	Nuclear Energy Institute	6
KLD Associates, INC	Nuclear Energy Institute	6
Duke Energy	Nuclear Energy Institute	6
Entergy	Nuclear Energy Institute	6
Progress Energy	Nuclear Energy Institute	6
Missouri Emergency Management Agency	Nuclear Energy Institute	6
State of Louisiana	State of New Jersey, Department of Environmental Protection (Jill Lipoti)	5
State of Louisiana	Nuclear Energy Institute	5
Exelon	Nuclear Energy Institute	5
Nebraska Emergency Management Agency	State of New Jersey, Department of Environmental Protection (Jill Lipoti)	4
KLD Associates, Inc.	State of New Jersey, Department of Environmental Protection (Jill Lipoti)	4
Palm Beach County, Division of Emergency Management—REP Program	State of New Jersey, Department of Environmental Protection (Jill Lipoti)	4
Nebraska Emergency Management Agency	Conference of Radiation Control Program Directors	1
State of Louisiana	State of New Jersey, Department of Environmental Protection (Patrick Mulligan)	1

Table 10 Summary of Endorsements

Most endorsed commenter	Nuclear Energy Institute	<ul style="list-style-type: none"> • Number of comments endorsed: 52 • Number of organizations that endorsed: 9
Commenter who endorsed the most organizations' comments	State of Louisiana	<ul style="list-style-type: none"> • Number of comments endorsed: 32 • Number of organizations that endorsed: 4
Commenter who endorsed the most individual comments	Office of Emergency Management, Monroe County, New York	<ul style="list-style-type: none"> • Number of comments endorsed: 47

4.0 CONCLUSION

The development of Supplement 3 has been a multiyear process that began with a technical study of protective action strategies and survey of the public within nuclear plant emergency planning zones (NUREG/CR-6953, “Review of NUREG-0654, Supplement 3, ‘Criteria for Protective Action Recommendations for Severe Accidents,’” Volumes 1, 2, and 3). Several draft versions of Supplement 3 were presented in various forums, and stakeholders offered informal input. The issue of protective action strategy enhancements has been discussed with stakeholders for several years. This input was incorporated, and a final draft was developed for stakeholder review.

The NRC used the *Federal Register Notice* process and www.regulations.gov to collect stakeholder input. The development of Supplement 3 has benefitted greatly from stakeholder input. The professionals who actually implement emergency response programs are best positioned to identify potential improvements and implementation difficulties. The NRC considers stakeholder input to be vital in the development of regulations and supporting guidance documents. After reviewing the comments, the staff recognized errors in language usage and implemented several proposed enhancements. Numerous changes were made.

The comments substantially affected revision of Supplement 3 in many areas, including the following:

- The protective action strategy development tool and supporting notes have been simplified.
- An appendix with communications guidance has been eliminated with a few important topics simplified and placed in the main body of the report.
- The expectation for coordination with OROs was clarified.
- Licensee and ORO roles were clarified.
- The previous guidance that Supplement 3 updates was identified.
- The authority of ORO decision-makers to select the strategies best for their site was clearly stated.
- Documentation expectations were stated.

This analysis of comment adjudication showed that the NRC agreed with about half of the comments received; although, it should be emphasized that agreement with a comment did not necessarily result in a change to Supplement 3. The vast majority of comments was constructive and contributed to improvement of the document. Even comments not accepted for action typically identified issues that should be considered in a full discussion of protective action strategy development. The nuclear emergency response community is a mature and knowledgeable group of professionals. The many comments received have helped to develop guidance that enhances nuclear plant emergency response.

APPENDIX: Spreadsheet Development

The appendix to this study summarizes in detail how the comment data was processed using Microsoft Excel and represents one possible way to obtain the results presented in the Analysis section (3.0) of this study. Microsoft Excel was the software used in the analysis of the dataset, although other acceptable software packages could have been substituted. Furthermore, much of the analysis performed in this study could have been performed using the Microsoft Excel add-on called the Data Analysis ToolPak; however, this add-on was unavailable to the NRC staff when this study was conducted. The discussion in this section follows the order in which the worksheets and calculations were created in Excel, and not necessarily the order in which the results are reported in this study. Each heading title in this section represents an actual worksheet created in Excel.

A.1 Key Worksheet

The Key Worksheet is the first worksheet created and is where all independent data are stored. “Independent data” in this context refers to data that are not dependent or referenced by other datasets or cells; it is the basic comment reporting information. All cells in the spreadsheet that reference commenter IDs and keywords will be linked to cells in this worksheet. Information reported on this worksheet includes the commenting organization, docket number, and ID, as well as keywords. This is a crucial worksheet in the analysis of the dataset and is cited throughout the other worksheets.

A.2 Comments Worksheet

The second worksheet created was the Comments Worksheet. Here, all comments from www.regulations.gov were copied, reformatted, and individually recorded. The staff placed each individual comment in its own cell. In this way, the comments can eventually be re-sorted in terms of different parameters. Table 11 presents the column headings from this worksheet and the essential information recorded with each comment. Recall that the *comment number* is a consecutive number applied to each comment and is for identification purposes only, and the *ID* identifies the commenter and is derived from the docket number. At this point report the commenter and all endorsements in the ID column of the worksheet in the format discussed in Section 3.2.

The comment number, ID, keyword category, and all keywords should be assigned a reference cell recalling the appropriate location of the Key Worksheet. With a large store of data, like that being analyzed here, use of a reference cell is preferable to manually entering data because it increases efficiency and decreases error. Furthermore, as the data become more complex and cells are sorted, by using reference cells, Excel will automatically update formulas and cells to reflect moved information.

Table 11 Comment Headings

Comment #	ID	Comment	Keyword1	Keyword2	Keyword3	Page	Answers	Keyword Category
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A.3 Keyword Count Worksheet

This worksheet is where the analysis begins. The data are compiled into a format that is conducive to calculating keyword frequencies. Since up to three keywords were recorded for every comment, it is essential to sort the data from the Comments Worksheet into a format that is more easily translated into mathematical relationships. The following headings are created in the new worksheet: Comment #, ID, Weighted Count, and Keyword. From the Comments Worksheet, all cells in the Comment # and ID columns are copied and pasted into the Keyword Count Worksheet. Then, the same sections are pasted a second and third time vertically. There will be two columns that repeat three times.

Next, the keyword1 column is copied from the Keyword Count Worksheet and pasted under the Keyword heading of the Keyword Count Worksheet. At the end of this section, the Keyword2 column is copied and pasted from the Comments Worksheet, and this operation is repeated for the Keyword3 column. The result is that all keywords are listed in one long column next to their ID columns.

Next, the weighted count is determined. Recall that the weighted count is a value applied to every single comment and reflects the number of organizations that made and endorsed each comment. In the absence of any statistical add-on programs for Excel, these values can be calculated manually or with a macro. Whichever method is implemented, the end result must be the count of commenters who made and endorsed every comment. Table 12 provides an example of this. If a comment is not endorsed, it is assigned a value of one, and every endorser adds one count to the total. The next and final step in this worksheet is to sort the data in terms of the keywords.

**Table 12: Example of Keyword Count Worksheet
(Weighted count is based on the number of commenters and endorsers)**

Comment #	ID	Weighted Count	Keyword
12	43	1	2010 Census/ETE guidance
13	44	1	2010 Census/ETE guidance
14	10 12 8E10 38E10 41E10 51E10 38E10	7	2010 Census/ETE guidance

1 This entire process was repeated for the Keyword Categories.

A.4 Keyword Analysis

At this point, keyword frequencies and percentages are calculated. Tables 6 and 7, and Figures 1 and 2, present the results of this analysis. First, the keyword count is calculated for each keyword using the weighted count (i.e., the number of commenters who made or endorsed each keyword); since the data are sorted in terms of keywords, these are relatively quick calculations. Recall the equations reported in Section 3.2:

$$f_k = \frac{k}{total}$$

$$\% = f_k \times 100$$

Where f_k is the keyword frequency, k is keyword count, and $total$ is the total weighted keyword count including endorsements. These equations are used to determine the frequency and percent of occurrence of a specific keyword. This process is repeated for the keyword categories.

A.5 Agree-Disagree Worksheet

This worksheet is used to determine the percentage of NRC/FEMA responses that either agree or disagree with the comments. From the Comments Worksheet, a dataset that includes Comment #, ID, and Answers is copied and then pasted into the new worksheet. Two new columns, Agree and Disagree, are then created. For each comment, the weighted count for that comment is recorded in either the Agree or the Disagree column, depending on the answer. Next, for both the Agree and Disagree columns, the sum function is used to calculate the total for each column, which is divided by the weighted count. When determining frequencies for this analysis, it is important to use the weighted count (510) and not the keyword count (736) that was used in the previous worksheet.

A.6 Commenter Composition Analysis

To analyze the composition of each commenter, the data on the Comments Worksheet is first sorted by commenter ID. Next, in the absence of a data analysis Excel add-on, the analyst should either create a macro or use the “count” function in Excel to determine the number of comments made by each contributor. These data should be reported to the Commenter Composition Worksheet. To determine the frequency of endorsements, this process is repeated, but this time sort and count by endorsements on the Comments Worksheet rather than by commenter.

BIBLIOGRAPHIC DATA SHEET

(See instructions on the reverse)

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10. SUPPLEMENTARY NOTES

11. ABSTRACT (200 words or less)

This study is a thorough analysis and adjudication of official public comment submissions for Supplement 3, Revision 1, "Guidance for Protective Action Strategies", draft report for comment issued March 2010, to NUREG-0654/FEMA-REP-1, Revision 1, "Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants," issued November 1980. The staff of the U.S. Nuclear Regulatory Commission (NRC) also developed a comment tracking and analysis process to gain further analytical insights into the nature of stakeholder comments. Comments on the draft version of Supplement 3 were solicited in the Federal Register (Volume 75, Number 44) published March 8, 2010. The NRC and the Federal Emergency Management Agency (FEMA), held a series of public meetings during the comment period to facilitate stakeholder understanding of the document.

The comment analysis approach developed in this study was used in analyzing comments on Supplement 3; however, this methodology can be adapted for other comment collections and reflects the NRC's desire to gain enhanced insights into stakeholder concerns.

12. KEY WORDS/DESCRIPTORS (List words or phrases that will assist researchers in locating the report.)

emergency preparedness, Supplement 3, protective action recommendation, shelter in place, FEMA, NUREG-0654/ FEMA-REP-1, comment analysis, comment adjudication, public messaging, precautionary protective action, evacuation time estimate

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