

Definitions and Guidelines to be Used
in Responding to this Request

1. The word "document" as used herein shall mean any written matter, whether produced, reproduced or stored on paper, cards, tapes, disks, belts, charts, films, computer storage devices or any other medium and shall include, without limitation, matter in the form of books, reports, studies, statements, speeches, notebooks, agreements, appointment calendars, working papers, manuals, memoranda, notes, records, correspondence, diaries, plans, diagrams, drawings, periodicals, lists, telephone logs, minutes, photographs, and any published materials and shall also include, without limitation, originals, copies (with or without notes or changes thereon) and drafts.
2. The word "communications" shall mean correspondence, contact, discussion, or any other kind of written or oral exchange between two or more persons or entities including, but not limited to, all telephone conversations, face-to-face meetings or conversations, visits, conferences, internal and external discussions, and exchange of a document or documents.
3. Applicants request that documents produced in compliance with this request be accompanied with an indication as to the particular paragraphs under which the documents are being produced.

4. In the event that it is claimed that any document responsive to any request is privileged, each privileged document should be fully identified in writing, signed by counsel, except that the substance thereof need not be described to the extent said substance itself is claimed to be privileged. To "identify" a document claimed to be privileged means to state:

- (a) the date on which the document was prepared;
- (b) the author or authors of the document;
- (c) the addressee(s) and recipient(s) of the document, if any;
- (d) the title of the document;
- (e) the number of pages in the document; and
- (f) the substance of the document to the extent it is not privileged.

5. "Identify" with respect to an expert witness means to state:

- (a) The name, mailing address, age and present professional or employment affiliation of the person;
- (b) The profession or occupation and field of claimed expertise of the person;
- (c) The history of formal education or training of the person, including but not limited to, (i) the name and address of each school where the person received special education training, (ii) the date those schools were

attended, and (iii) a description of each degree earned, including the date and granting institution;

(d) The history of specialized training in the area of claimed expertise, including, but not limited to, (i) the type of training received, (ii) the name and address of the institution providing this training, and (iii) the dates of such training;

(e) A list of publications of any kind by the person in the area of claimed expertise, including, but not limited to, (i) the title and subject matter, (ii) the name and address of the publisher, and (iii) the date of publication;

(f) A list of any and all licenses in the area of claimed expertise, including, but not limited to, (i) the designation of the authority by which the license was issued, (ii) the date(s) of the licensing, (iii) the requirements for obtaining each license, and (iv) the manner by which these requirements were met;

(g) The amount of time the person has worked in the field of claimed expertise, stating periods where work was other than on a full-time basis;

(h) The name and address of every person, or every corporation or other institution, that has employed the person within the last ten years of employment;

(i) All periods of claimed self-employment, including a description of all duties and responsibilities thereof;

(j) All previous experience in the field of claimed expertise which involved problems, analyses or studies similar to those concerning which the person is expected to testify in this proceeding;

(k) All other litigation in which the person has been consulted, specifying those matters in which the person has testified, including the name of the case or matter and the court or other forum in which testimony was given; and

(l) Any other experience in the field of claimed expertise.

6. Please include, with the answer to each of the interrogatories that follow, the name, institutional affiliation and professional qualifications, if any, of the person who is answering.

7. "Amended Contention on Notification System" shall mean the Mass AG's contention and bases admitted to this proceeding by the On-Site Licensing Board by Memorandum and Order dated June 2, 1988.

8. If any document required to be identified or produced in these answers has been destroyed and no copy exists within the Mass AG's or the Commonwealth's possession, custody or control, identify the documents, state the date of its

destruction, identify the person responsible for ordering destruction, state the purpose of destruction, and (if applicable) produce any document retention policy that governed the retention or destruction of the document. To "identify" a document, for all purposes in these requests other than those covered by Instruction #4 above, means to state:

- (a) the date on which the document was prepared;
- (b) the author or authors of the document;
- (c) the addressee(s) and recipient(s) of the document, if any;
- (d) the title of the document;
- (e) the number of pages in the document; and
- (f) the substance of the document.

Interrogatories and Requests for Production

1. With respect to the Mass. AG's answers to each of the interrogatories 6 - 46 that follow, is that answer based upon reference to or knowledge of the existence of one or more documents? If so, please:

- (a) Identify each such document on which the answer is based.
- (b) Identify the information in each document on which the answer is based.
- (c) Identify all documents possessed by or known to

exist by the Mass AG which deal with the same subject matter.

(d) Produce all identified documents.

2. With respect to the Mass AG's answers to each of the interrogatories 6 - 46 that follow, is that answer based upon any type of study, calculation, procedure, method, instruction, assumption, conclusion, recommendation or analysis? If so, please:

(a) Describe the nature of the study, calculation procedure, method, instruction, assumption, conclusion, recommendation or analysis.

(b) Identify and produce any documents that constitute, discuss or describe it.

(c) Identify the person(s) who performed it, including the institutional affiliation and professional qualifications, if any, of the person(s).

(d) State when and where it was prepared or performed.

(e) Describe in detail the information or data that was examined.

(f) Describe the results.

(g) Explain how it provides a basis for the answer.

3. With respect to the Mass. AG's answers to each of the interrogatories 6 - 46 that follow, is that answer based upon conversations, consultations, correspondence or any other

type of communication with one or more individuals or entities? If so, please:

- (a) Identify each such individual or entity.
- (b) State the educational and professional background of each such individual, including occupation and institutional affiliates.
- (c) Describe the nature of each communication with each such individual or entity, when it occurred, and identify all other individuals or entities involved.
- (d) Describe in detail the information received from each such individual or entity, and explain how it provides a basis for the answer.
- (e) Identify and produce each letter, memorandum, contract, tape, note or other document related to each conversation, correspondence, or other communication with such individual or entity.

4. Does the Mass AG intend to offer the testimony of any expert witness with respect to the Amended Contention on Notification System? If so, please:

- (a) Identify each expert witness whom the Mass AG intends to present with respect to this contention.
- (b) State the substance of the facts to which each expert witness is expected to testify.
- (c) State the substance of the opinion or opinions to which each expert witness is expected to testify.

(d) Provide a summary of the grounds for each opinion to which each expert witness is expected to testify.

(e) State whether the facts and opinions listed in response to the foregoing are contained in any written report, memoranda, calculation, analysis or other transcript, and, if so, whether the Mass AG is willing to produce the same without the necessity of a notice to produce.

(f) State whether the opinion of any expert witness is based in whole or in part on any scientific rule or principle, and, if so, set forth such rule or principle.

(g) State whether the opinion of any expert witness is based in whole or in part on any code or regulation, governmental or otherwise, and, if so, identify each such code or regulation and the specific section or portion thereof relied upon.

(h) State whether the opinion of any expert witness is based in whole or in part upon any scientific or engineering book or other publication, and, if so, identify the book or publication.

5. Does the Mass AG intend to offer the testimony of any non-expert witness with respect to the Amended Contention on Notification System? If so, please:

(a) Identify each non-expert witness whom the Mass AG intends to present with respect to this contention.

(b) State the substance of the facts to which each non-expert witness is expected to testify.

(c) State the substance of the opinion or opinions to which each non-expert witness is expected to testify.

(d) Provide a summary of the grounds for each opinion to which each non-expert witness is expected to testify.

(e) State whether the facts and opinions listed in response to the foregoing are contained in any written report, memoranda, or other transcript, and, if so, whether the Mass AG is willing to produce the same without the necessity of a request to produce.

(f) State whether the opinion of any non-expert witness is based in whole or in part on any scientific rule or principle, and, if so, set forth such rule or principle.

(g) State whether the opinion of any non-expert witness is based in whole or in part on any code or regulation, governmental or otherwise, and, if so, identify each such code or regulation and the specific section or portion thereof relied upon.

(h) State whether the opinion of any non-expert witness is based in whole or in part upon any scientific or engineering book or other publication, and, if so, identify the book or publication.

6. Has any representative of or person employed by the Department of the Attorney General of the Commonwealth been

in contact with any selectman, civil defense director or other official of Amesbury, Merrimack, Newbury, West Newbury, Newburyport, Salisbury or Haverhill concerning any actual or proposed siren warning system for Seabrook Station? If so, please:

(a) Identify each selectman, civil defense director or other official who was contacted, and the representative or employee who contacted them.

(b) Describe in detail the date, time, manner, place, and substance of the communication.

(c) Identify and produce every document that reflects, refers to, or relates in any way to any such contact.

7. Has any other official, representative, or employee of the government of the Commonwealth of Massachusetts have been in contact with any selectman, civil defense director or other official of Amesbury, Merrimack, Newbury, West Newbury, Newburyport, Salisbury or Haverhill concerning any actual or proposed siren warning system for Seabrook Station? If so, please:

(a) Identify each selectman, civil defense director or other official who was contacted, and the official, representative, or employee who contacted them.

(b) Describe in detail the date, time, manner, place, and substance of the communication.

(c) Identify and produce every document that reflects, refers to, or relates in any way to any such contact.

8. Please state in detail all the facts underlying the Mass AG's assertion that "the VANS and the New Hampshire fixed sirens because of their locations, height, acoustic range and number, do not provide tone or message coverage for essentially 100 percent of the population in the Massachusetts plume exposure pathway EPZ at the sound pressure levels required in NUREG-0654 and FEMA-REP-10," and explain exactly how those facts support the assertion.

9. Please state whether the Mass AG contends that Applicants are required to "provide tone or message coverage for essentially 100 percent of the population in the Massachusetts plume exposure pathway EPZ," and state in detail all the facts, opinions, rulings, regulations and other sources underlying that answer, explaining in each case how the fact, opinion, ruling, regulation or other material supports that answer.

10. Please identify every segment of the population in the Massachusetts plume exposure pathway EPZ which the Mass AG contends would not receive tone or message coverage at the sound pressure levels specified in NUREG-0654 and FEMA-REP-10 from the VANS and the New Hampshire fixed sirens, state how many people are involved in each instance, and state what

sound pressure levels those segments of the population would receive.

11. Please identify every local ordinance which the Mass AG contends would prohibit the Applicants from operating their staging areas and from operating their VANS vehicles at the pre-selected acoustic locations, stating in each case exactly how each ordinance acts to prohibit the operation.

12. Please state in detail all the facts underlying the Mass AG's assertion that "the fourteen VANS locations are physically inaccessible to the VANS equipment", define precisely what is meant by "physically inaccessible," and explain exactly how those facts support the assertion.

13. Please state in detail all the facts underlying the Mass AG's assertion that "the [VANS] vehicles cannot withstand and will not operate properly with the weights, amount and nature of equipment intended to be carried by the vehicles," and explain exactly how those facts support the assertion.

14. Please state in detail all the facts underlying the Mass AG's assertion that "the weight distribution with the siren fully extended will cause the equipment to fall and/or the lifting mechanism to bend or break under heavy wind or precipitation conditions," define precisely what is meant by "heavy wind" and "heavy . . . precipitation", and explain exactly how those facts support the assertion.

15. Please state in detail all the facts underlying the Mass AG's assertion that "the telescopic crane will not reliably lift the siren to its fully extended position because of the weight of the siren and the capacity of the crane", define exactly what is meant by "reliably", and explain exactly how those facts support the assertion.

16. Please state in detail every fact, not discussed in a previous answer, underlying the Mass AG's assertion that "the VANS vehicles are inadequate for their intended use", and explain exactly how these facts support the assertion.

17. Please state in detail what the Mass AG contends are the appropriate criteria for determining VANS vehicle adequacy, and state in detail all the facts, opinions, rulings, regulations, and other sources underlying that answer, explaining in each case how the fact, opinion, ruling, regulation, or other material supports that answer.

18. Please state in detail all the facts, analyses and estimates underlying the Mass AG's assertion that "the time needed for driver alert, dispatch, route transit, setup and activation in accordance with NRC regulations will exceed 15 minutes for many of the VANS vehicles in optimum weather conditions," and explain exactly how those facts support the assertion.

19. Please state in detail all the facts and estimates underlying the Mass AG's assertion that "in poor weather,

heavy traffic, and nighttime conditions the times needed to accomplish these tasks will increase," and explain exactly how those facts support the assertion.

20. Please state in detail how long the Mass AG contends it will require to perform each of the following functions, for (1) optimum weather conditions and (2) poor weather, heavy traffic, or nighttime conditions, and state in detail all the facts underlying each answer and how those facts support the answer:

- (a) notification of VANS driver;
- (b) VANS driver proceeds to vehicle;
- (c) VANS driver checks out vehicle and equipment;
- (d) VANS driver starts vehicle and leaves staging area;
- (e) VANS vehicle proceeds to acoustic location;
- (f) setup and activation of siren at acoustic location.

21. Please state whether the Mass AG contends that the VANS are required to activate "both alert signal and message capability within the 15 minute period", and state in detail all the facts, opinions, rulings, regulations and other sources underlying that answer, explaining in each case how the fact, opinion, ruling, regulation or other material supports that answer.

22. Please state in detail all the facts underlying the Mass AG's assertion that "snow, icy and extreme cold weather conditions will impede extension of the sirens to their

operational position, rotation and oscillation of the sirens during the tone and message modes and operation of the sirens themselves," define exactly what is meant by "oscillation of the sirens", and explain exactly how those facts support the assertion.

23. Please state exactly how much each level of snow, of icy weather, and of cold weather will impede each of (i) the extension of the sirens to their operational position, (ii) the rotation and oscillation of the sirens during the tone and message modes, (iii) the operation of the sirens themselves, and state in detail all the facts underlying the answer for each level and function.

24. Please state in detail all the facts and assumptions (including time duration assumptions) underlying the Mass AG's assertion that "at a sound level of 134 dBC anyone within 100 feet of the siren during its operation will suffer severe hearing damage," define exactly what is meant by "severe hearing damage", and explain exactly how those facts support the assertion.

25. Please state in detail all the facts underlying the Mass AG's assertion that "because of the large size of the intended dispersion angle (60 degrees), sound irregularities will occur within the coverage angles including gaps in sound coverage for certain areas," define exactly what is meant by "sound irregularities", "dispersion angle", "coverage angles"

and "gaps in sound coverage", and explain exactly how those facts support the assertion.

26. Is it the assertion of the Mass AG that a "large" "dispersion angle" would cause more "sound irregularities" than a smaller "dispersion angle"?

(a) If so, please:

(i) state all the facts underlying this assertion, and explain exactly how those facts support the assertion;

(ii) identify all persons with whom the Mass AG consulted in developing the assertion, and state the substance of each person's input on the assertion;

(iii) identify and produce all documents consulted or relied upon by the Mass AG, or by persons consulted by the Mass AG, in developing the assertion.

(b) If not, please:

(i) state all the facts underlying this answer, and explain exactly how those facts support the answer;

(ii) identify all persons with whom the Mass AG consulted in developing the answer, and state the substance of each person's input on the answer;

(iii) identify and produce all documents consulted or relied upon by the Mass AG, or by persons consulted by the Mass AG, in developing the answer.

27. Please state in detail all the facts underlying the Mass AG's assertion that "the oscillation of the speaker assembly will cause gaps in coverage when the siren is used in its tone alert mode", define exactly what is meant by "oscillation of the speaker assembly" and "gaps in coverage", and explain exactly how those facts support the assertion.

28. Please state in detail all the facts underlying the Mass AG's assertion that "listeners in areas where there is an overlap in sound coverage from 2 or more sirens . . . will experience severe echo conditions, rendering any voice message unintelligible", define exactly what is meant by "an overlap in sound coverage", "unintelligible" and "severe echo conditions", and explain exactly how those facts support the assertion.

29. Please state in detail what are the orientation and location conditions of sirens and listeners for which the Mass AG asserts that "severe echo conditions" would occur.

30. Please identify all areas in which the Mass AG contends "there is an overlap in sound coverage from 2 or more sirens", and state in detail all the facts underlying the answer.

31. Please identify all circumstances when the Mass AG contends it would be required for message mode to be used by the primary alerting system, and state in detail all the facts, opinions, rulings, regulations and other sources underlying the answer, explaining in each case exactly how the fact, opinion, ruling, regulation or other material supports that answer.

32. Please state in detail all the facts underlying the Mass AG's assertion that "sufficient drivers and backup drivers will not be stationed at the six staging areas to ensure 24-hour availability of the system," and explain exactly how those facts support the assertion.

33. Please state how many drivers and backup drivers the Mass AG contends would be "sufficient. . . to ensure 24-hour availability of the system," and state in detail all the facts underlying that answer.

34. Please state in detail all the facts underlying the Mass AG's assertion that "the system will work reliably. . . only when each vehicle is manned by at least two people," and explain exactly how those facts support the assertion.

35. Please define exactly what the Mass AG means by "adequate fidelity to ensure intelligibility", including specific values, and state in detail all the facts, opinions, rulings, regulations and other sources underlying that definition, explaining in each case how the fact, opinion,

ruling, regulation or other material supports that definition.

36. Please state in detail all the facts underlying the Mass AG's assertion that "poor weather. . . is equally or more debilitating or [sic] the use of a helicopter," and explain exactly how those facts support the assertion.

37. Please state exactly what degrees of high wind, heavy rain, snow, icy conditions, and/or extreme cold conditions the Mass AG contends would be "equally or more debilitating or [sic] the use of a helicopter," and state in detail all the facts underlying that answer.

38. Please state in detail all the facts underlying the Mass AG's assertion that "a steady 3 to 5 minute tone alert capable of repetition cannot be accomplished with the airborne system for significant numbers of people even within the covered area because the speed necessary to provide that duration of a tone is too slow for extended operation of the aircraft," define exactly what is meant by "significant numbers of people", "covered area" and "too slow", and explain exactly how those facts support the assertion.

39. Please state whether the Mass AG contends that Applicants are required to provide "a steady 3 to 5 minute tone alert" with their airborne backup system, and state in detail all the facts, opinions, rulings, regulations and other sources underlying that answer, explaining in each case

how the fact, opinion, ruling, regulation or other material supports that answer.

40. Please state in detail all the facts underlying the Mass AG's assertion that "any attempted informational messages for the airborne siren will be garbled and unintelligible because of the strength and size of the speaker array and amplifier system, the height of the aircraft and the effect of the helicopter's rotary blades," define exactly what is meant by "garbled and unintelligible", and explain exactly how those facts support the assertion.

41. Please identify all circumstances when the Mass AG contends it would be required for informational messages to be broadcast by the airborne backup system, and state in detail all the facts, opinions, rulings, regulations and other sources underlying that answer, explaining in each case exactly how the fact, opinion, ruling, regulation or other material supports that answer.

42. Please list and produce all documents possessed by the government of the Commonwealth of Massachusetts or any department, agency, office, commission, authority, official, employee or representative thereof that reflect, refer to, or relate in any way to any emergency warning sirens installed or contemplated within the Commonwealth of Massachusetts, other than sirens installed by Public Service Company of New Hampshire.

43. Please identify, by stating the name, institutional affiliation and professional qualifications, if any, all individuals who assisted the Mass AG in preparing the Amended Contention on Notification System, and describe in detail the nature and substance of their assistance.

44. Please identify and produce all documents consulted or relied upon by the Mass AG, or by any individuals assisting the Mass AG, in preparing the Amended Contention on Notification System.

45. Please list, identify the source (including preparer's name, institutional affiliation and professional qualifications, if any) of, and produce, all studies, tests, analyses, procedures, methods, instructions, conclusions, recommendations, computer runs or similar scientific reviews, prepared for or possessed by the Mass AG, and all assumptions and data used therein, relating to:

(a) siren and/or voice mode emergency notification systems;

(b) sound and/or ambient noise levels in any areas where emergency planning for Seabrook Station is required;

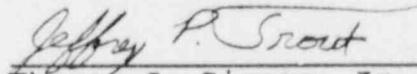
(c) acoustic range models or analyses;

(d) road blockage or traffic interruption in connection with the VANS system;

(e) meteorological conditions, including but not limited to wind speeds, temperature and precipitation, in connection with the VANS system.

46. Please identify all studies, analyses or other work which Mass AG currently intends to perform or have performed in connection with any matter raised by his Amended Contention on Notification System or bases thereunder.

By their attorneys,



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CERTIFICATE OF SERVICE

DOCKETED
USNRC

I, Kathryn A. Selleck, one of the attorneys for the Applicants herein, hereby certify that on June 24, 1988, I made service of the within document by mailing copies thereof, postage prepaid to each of the following parties with one exception, namely, Carol S. Sneider, Esquire, Assistant Attorney General, who is being served in hand this date:

JUN 28 P5:29
OFFICE SECRETARY
DOCKETING & SERVICE
BRANCH

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Board Panel Docket (2 copies)
U.S. Nuclear Regulatory
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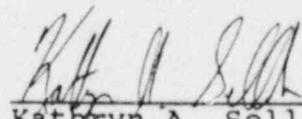
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