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October 11, 1989



UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

before the

ATOMIC SAFETY AND LICENSING BOARD

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| In the Matter of | |
| PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE, et al. | Docket Nos. 50-443-OL<br>50-444-OL |
| (Seabrook Station, Units 1 and 2) | (Offsite Emergency Planning Issues) |

**APPLICANTS' RESPONSE TO INTERVENORS' MOTION TO ADMIT CONTENTIONS ON THE SEPTEMBER 27, 1989 EMERGENCY PLAN EXERCISE**

**STATEMENT OF THE CASE**

On September 27, 1989, Applicants conducted an exercise to test the Seabrook onsite emergency plans as contemplated by the third and fourth sentences of 10 CFR 50, App. E § IV.F.1. Under date of September 28, 1989, the Attorney General of The Commonwealth of Massachusetts (MAG), acting for himself, Seacoast Anti-Pollution League (SAPL), and New England Coalition on Nuclear Pollution (NECNP) filed a document styled "Intervenors' Motion to Admit Contentions on the September 27, 1989 Emergency Plan Exercise" ("Motion"). The Motion seeks to have admitted for litigation the following contention:

"The September 27, 1989 Seabrook Station





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> onsite exercise was not a full-scale onsite exercise and did not test all or even a significant number of the major observable portions of the Seabrook Station RERP ('onsite plan' or 'SSRERP'). For this reason, the September exercise did not meet the regulatory requirements for the onsite exercise to take place within one year of licensing ('pre-licensing one-year onsite exercise') as required by 10 CFR Part 50, Appendix E, IV F. ¶1. See also CLI-89-19. As a result, the September exercise provides no basis for the required finding of reasonable assurance as set forth in 10 CFR 50.47(a)(1) and (2), and that exercise is not in compliance with 10 CFR 50.47(b)(14). See also ALAB-900."[1]

The contention is accompanied by a professed statement of basis,[2] a purported showing that the "five factors" test for late-filed contentions is met,[3] and an argument as to why the provisions of 10 CFR § 2.734 regarding the reopening of closed evidentiary records need not be met.[4]

## ARGUMENT

### I. THE EVIDENTIARY RECORD IS CLOSED IN THIS PROCEEDING, AND ITS PROPONENTS HAVING FAILED TO ADDRESS, AND DEMONSTRATE COMPLIANCE WITH, THE PROVISIONS OF 10 CFR § 2.734, THE MOTION MUST BE DENIED.

MAG takes the position that there is no need to satisfy the requirements for reopening the record set out in 10 CFR

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1 Motion, Attach. A at 1.

2 Id. at 1-3. And see Exhs. 1-3.

3 Motion at 4-8.

4 Id. at 8-9.

§ 2.734 in order to have the contention at issue admitted for litigation. In so contending he (1) incorporates by reference certain of his arguments made in prior pleadings,[5] (2) references the fact that the onsite exercise is a necessary prerequisite to licensing under 10 CFR App. E § IV.F.1,[6] and then (3) notes that in its recent decision denying the Applicants' request for an exemption, the Commission "made no reference at all to any requirement to reopen the record" and argues that, by implication, this means that compliance with 10 CFR § 2.734 is unnecessary.[7]

MAG's argument ignores the fact that, while it may be that there is a right to litigate matters material to licensing, it is also well settled that this right is subject to "placing reasonable requirements upon the filing of late-filed contentions."[8] In a case like that at bar, where the evidentiary record is closed, one of those reasonable requirements is compliance with 10 CFR § 2.734. As we understand the prior pleadings incorporated by reference by MAG, MAG's response to the foregoing is to say that two 1984 decisions of the United States Court of Appeals for the

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5 Motion at 8.

6 Id.

7 Id. at 8-9.

8 Public Service Company of New Hampshire (Seabrook Station, Units 1 and 2), ALAB-918, 29 NRC 473, 481 at n.21 (1989).

District of Columbia Circuit, UCS[9] and Mothers for Peace,[10] should be read as invalidating the 10 CFR § 2.734 standards for reopening on a matter which is material to licensing. MAG relies upon excerpts from these two cases for the extraordinary proposition that the court had essentially declared invalid a not-then-yet-promulgated Commission rule (10 CFR § 2.734), at least insofar as exercise contentions are concerned. However, a review of the two cases reveals that the only regulation UCS discussed was 10 CFR § 2.206, (10 CFR § 2.734 being then nonextant), which is a rule of unfettered discretion. Mothers for Peace discussed the agency case law which set out only one of the two then-extant "decision generated" standards for reopening, which standard was one which required the movant to show that a different result would result. Of course, the later-adopted Rule of Practice, 10 CFR § 2.734, did not adopt that draconian standard, and is, for that reason, not a rule of unfettered discretion and, thus, not within the ambit of any ruling in Mothers for Peace.[11] Thus under the holding of the Appeal Board in ALAB-918 cited supra n.8, 10 CFR § 2.734 is equally as applicable in this setting as the "late-filed" contention

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9 Union of Concerned Scientists v. NRC, 735 F.2d 1437 (D.C. Cir. 1984).

10 San Luis Obispo Mothers for Peace v. NRC, 751 F.2d 1287 (D.C. Cir. 1984).

11 10 CFR § 2.734(a)(3); Statement of Considerations 51 Fed. Reg. 19539 (May 30, 1986).

rule. MAG having made no attempt to comply with the provisions of 10 CFR § 2.734, the Motion must fail.

## II. THE BALANCING OF THE "FIVE FACTORS" DOES NOT FAVOR ADMISSION OF THE PROPOSED CONTENTION FOR LITIGATION.

As MAG himself acknowledges, the Motion must satisfy the provisions of 10 CFR § 2.714 governing late-filed contentions.[12] This has not been done. Assuming that there exists good cause for the late filing on the theory that the contention could not have been filed before the exercise was held, and conceding that, as is almost always the case, the less weighty[13] second (protection of the movant's interests) and fourth (extent to which that interest is represented by existing parties) factors favor the Movants, the fact is that analysis of the third (assistance in development of a sound record) and fifth (delay) factors reveals a balance which tips decidedly against allowance of the motion.

Commission "case law establishes both the importance of the third factor in the evaluation of late-filed contentions and the necessity of the moving party to demonstrate that it has special expertise on the subjects which it seeks to

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12 Public Service Company of New Hampshire (Seabrook Station, Units 1 and 2), CLI-89-19, 30 NRC ___, Slip Op. at 4 n.5 (Sept. 15, 1989).

13 Commonwealth Edison Company (Braidwood Nuclear Power Station, Units 1 and 2), CLI-86-8, 23 NRC 241, 245 (1986); South Carolina Electric and Gas Company (Virgil C. Summer Nuclear Station, Unit 1), ALAB-642, 13 NRC 881, 895 (1981).

raise. [Citation omitted.] The Appeal Board has said: 'When a petitioner addresses this criterion it should set out with as much particularity as possible the precise issues it plans to cover, identify its prospective witnesses, and summarize their proposed testimony'."[14]

In a seeming effort to comply with this third factor, MAG has listed the names of several investigators and paralegal assistants from his office who will testify as fact witnesses as to certain events that they claim[15] did not occur.[16] We are further advised that this testimony, in conjunction with certain exhibits attached to the Motion and other documents, "will demonstrate that the issues raised in the Contention are genuine."[17]

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14 Commonwealth Edison Company (Braidwood Nuclear Power Station, Units 1 and 2), CLI-86-8, 23 NRC 241, 246 (1986), citing with approval, Mississippi Power and Light Co. (Grand Gulf Nuclear Station, Units 1 and 2), ALAB-704, 16 NRC 1725, 1730 (1982) (emphasis added). Accord, Public Service Company of New Hampshire (Seabrook Station, Units 1 and 2), ALAB-918, 29 NRC 473, 483-84 (1989).

15 We say "claim" because, while there is no doubt that the promised testimony as to the lack of activity at the dog track and the fire station, Motion at 6, would be accurate, the fact is that offsite monitoring teams were dispatched as part of the exercise, as can be seen from the Exercise Report which is attached hereto as Appendix 1. Appendix 1, Inspection Report 50-443/89-10 at 8-9. We are at a loss to explain how six MAG witnesses missed this.

16 Motion at 6-7.

17 Motion at 7.

To begin with, MAG is not applying the right standard to his analysis of the factor. The test is not whether his evidence will show that there are genuine issues; the test is whether he will have substantive evidence which will contribute to the resolution of the issues. This he does not have. The fact witnesses he identifies will testify to matters that could easily be stipulated and the documents speak for themselves. What MAG should be describing, and does not, is expert testimony on the issue of whether the scope of this exercise was so narrow that it would fail to reveal fundamental flaws that existed in the plan. He identifies no witness, testimony, or other evidence of this description. In short, the showing on factor three, the most important factor, is extremely sparse, and, indeed, is totally lacking as to the controlling issue.

As to the fifth factor: there is no doubt that admission of this or any other exercise contention has major potential for causing delay. Indeed, MAG is candidly on record in this proceeding as admittedly fomenting delay for delay's sake in order to defeat the licensing of this plant. Furthermore, the amount of delay need not be large to be unacceptable in the Seabrook setting. the public has been treated to "nearly eight years of this licensing proceeding;"[18] enough is enough! Obviously the admission of the contention will broaden the issues. MAG's argument that

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18 CLI-89-18, supra, at 2.

its admission will not increase the issues which have to be resolved is a non sequitur. In an operating license proceeding no issue has to be resolved unless it is brought into the proceeding. Granting the Motion would expand the scope of this proceeding which, as of this juncture, does not include litigation of the onsite exercise. The fifth factor weighs heavily against admission.

The two most important factors weigh against admission. Thus, the balance favors denial of the Motion.

## III. THE CONTENTION FAILS FOR LACK OF BASIS.

### A. Introduction - The Basis Argument as Made.

The assertion of basis made in support of the proffered contention is not a model of clarity. Nevertheless, Applicants understand the theory being advanced to be as follows: An NRC IE Inspection Procedure No. 82301, which is attached as Exhibit 1 to Attachment "A" to the Motion, sets forth a statement, quoted at Page 1 of Attachment "A" to the Motion, that "the entire program must be evaluated in the initial exercise prior to escalation of power beyond 5%." In addition, another sentence from the same Exhibit 1 is quoted to the effect that the exercise scenario should be reviewed "to determine that there is reasonable assurance that all major elements of the response as specified in 10 CFR 50,

Appendix E, Part IV F will be tested . . . ."[19] After referencing a document, which MAG says is inapplicable to the situation at hand, other than for the purpose of referencing the relevant parts of NUREG-0654 which MAG claims must be demonstrated,[20] MAG next goes on to make the point that a portion of the exercise scenario from the June 1988 exercise, which he attaches as Exhibit 3 to Attachment "A," shows that more objectives were demonstrated in that exercise with respect to the onsite plan than were demonstrated or attempted to be demonstrated in the recent exercise. He ascribes the lack of demonstration of these objectives to four enumerated matters which he believes existed and caused a failure to demonstrate the objectives his Exhibits 1 and 3 purportedly show were required to be demonstrated.[21]

In short, the argument, as we understand it, is that the Staff document referenced by MAG has definitively interpreted the applicable regulations to require that all "major portions" of the onsite plan be demonstrated in the recent exercise, and this has not been done because of the supposed failure to include certain matters in the scenario. While,

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19 Motion, Attach. A at 2.

20 MAG references IE 82302 which he attaches as Exhibit 2 to Attachment "A" to his pleading. However, in Footnote 1 in Attachment "A," he makes clear his view that this document is not to be deemed the controlling document. This method of "short handing" the writing process is quite legitimate, we suppose, but it surely is confusing.

21 Motion, Attach. A at 3.

as shown infra, the document that MAG relies upon has been superceded in light of the 1987 rule change, and therefore, his basis is nonextant for that reason,[22] immediately below we demonstrate that even assuming the governing document was the one attached,[23] its own language does not admit of the interpretation MAG would give it.

### B. The Language of MAG's Attached Staff Document, Even if it Were Controlling, Does Not Admit of the Interpretation that it Governs the Exercise of Concern Here.

As noted above, the key to MAG's entire argument is the language he quotes at Page 1 of his Attachment "A" taken from his attached Exhibit 1. As he correctly quotes it, it makes that document applicable only to "the initial exercise." However, the recent exercise was not the initial exercise of the Seabrook onsite plan. The onsite plan was exercised not only during the June 1988 exercise, but also on occasions before that. The language does not purport to say that the "initial exercise" has to be the "within one year" exercise under the new regulation. As the Commission itself has

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22 See § III. C, infra.

23 The attached document is a staff inspection procedure. It is, of course, not a definitive interpretation of the regulations and any interpretation it purports to make is subject to challenge. E.g., Vermont Yankee Nuclear Power Corp., (Vermont Yankee Nuclear Power Station), ALAB-179, 7 AEC 159, 174 n.27 (1974); Gulf States Utilities Co. (River Bend Station, Units 1 and 2), ALAB-444, 6 NRC 760, 772 (1977).

recognized, the Seabrook "on-site plan has been previously exercised and adjudicated."[24] In short, the exercise in question was not the initial exercise and therefore the key piece of paper relied upon by MAG, on its face, has no applicability.

### C. The Document Upon Which MAG Relies was Published in Conformity With the Regulation as it Read Prior to 1987 and Has Been Recently Superceded.

As noted earlier, MAG also quoted, on Page 2 of his statement of basis, language from his attached document concerning the scope of the exercise scenario. Immediately after the sentence he quotes from Page E1-1 of his attached Exhibit 1 appears the following:

> "In addition, it must be determined that the exercise involves the required level of State and local involvement (small or large scale) as prescribed in 10 CFR 50, Appendix E, Part IV.F."[25]

What becomes clear is that the document attached to MAG's Motion was written at the time that the full participation exercise was the only pre-licensing exercise for on and off-site plans. However, since the rule change in 1987, there exists the possibility of an exercise of the onsite plans exclusively after the initial full participation exercise. And, indeed, the document which MAG attaches to his Motion,

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24 Public Service Company of New Hampshire (Seabrook Station, Units 1 and 2), CLI-89-19, 30 NRC ___, Slip Op. at 4 (Sept. 15, 1989).

25 Motion, Attach. A at E1-1 - E1-2.

which was issued on July 1, 1983, has now been superceded by a new Inspection Procedure 82301 which was issued on August 21, 1989, a copy of which is attached hereto as Appendix 2.

Even a cursory review of Appendix 2 will show that the critical language upon which MAG relies has now been removed from Inspection Procedure 82301. The document attached by MAG having been superceded, it cannot any longer supply a basis for a contention.[26] Thus, the contention fails for want of a basis.

### D. There is no Regulatory Basis for the Contention Proffered.

Prescinding from all of the foregoing, the fact remains that there is no regulatory basis for the contention as pleaded. The thrust of the contention is that the Applicants were required to, but did not, test all of the "major observable portions" of the on-site plan. It is stated in the contention that this requirement comes from 10 CFR App. E, § IV.F.1.

The language requiring the testing of "major observable portions" of plans comes from Footnote 4 to 10 CFR 50, App. E § IV.F.1. That footnote defines the term "full

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26 Public Service Company of New Hampshire (Seabrook Station, Units 1 and 2), CLI-89-3, 29 NRC 234, 241 (1989); Vermont Yankee Nuclear Power Corporation (Vermont Yankee Nuclear Power Station), 30 NRC ___, Slip Op. at 33 (July 26, 1989); Georgia Power Co. (Vogtle Electric Generating Plant, Units 1 and 2), ALAB-872, 26 NRC 127, 136 (1987).

participation" as used in the phrase "full participation exercise." The exercise run on September 27, 1989, however, was not, by definition, a "full participation exercise." It was an exercise run pursuant to the third and fourth sentences of 10 CFR 50, App. E § IV.F.1 which is the exercise to be run when, as, and if there has been a full participation exercise run within two years of licensing, but not within one year of licensing. Thus, the regulatory language which forms the underpinning of the contention as pleaded simply has no applicability to the September 1989 onsite exercise. This is yet another compelling reason for finding the statement of basis deficient.

### E. The Activities Which MAG Claims Should Have Been Undertaken Are Not Necessary to Reveal Whether There is a Fundamental Flaw in the Plan.

The seminal case with respect to the necessary scope of an emergency exercise is the decision of the Appeal Board in Long Island Lighting Co. (Shoreham Nuclear Power Station, Unit 1), ALAB-900, 28 NRC 275 (1988). Therein the Appeal Board stated the standard by which the scope of an exercise would be judged was: "that the exercise itself must be comprehensive enough to permit a meaningful test and evaluation of the emergency plan to ascertain if that plan is fundamentally flawed."[27] Since that time, the Appeal Board has also held that if the flaw revealed is one which can be

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27 ALAB-900, 28 NRC at 286 (emphasis in the original).

readily corrected or can be corrected by supplemental training of personnel, it is not a fundamental flaw.[28] We are unenlightened in MAG's filing as to how the failure to engage in the four activities enumerated on Page 3 of the Statement of Basis precluded the ascertainment of any possible fundamental flaw in the plan. This is a pleading failure which dooms the effort.

Prescinding from the pleading failure, analysis reveals that MAG could not have made such a factual allegation in any event.[29] The first shortfall alleged by MAG is that the exercise did not:

> "1) advance beyond a declaration of site area emergency and, therefore, did not trigger sufficient offsite protective action decision making."[30]

If the exercise had required more protective action decision-making, the only problem that could have resulted would be that someone responsible therefor may have made a decision that was erroneous in retrospect as to the action to be taken. This is a personnel training matter.

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28 Public Service Company of New Hampshire (Seabrook Station, Units 1 and 2), ALAB-918, 29 NRC 473, 485-86 (1989). See also Long Island Lighting Co. (Shoreham Nuclear Power Station, Unit 1), ALAB-903, 28 NRC 499, 506 (1988).

29 This is not surprising. The onsite plan has been exercised several times previously. Presumably any "fundamental flaw" would long since have come to light.

30 Motion, Attach. A at 3.

The second shortfall alleged is that the exercise did not:

> "2) involve a medical team from a local support services agency (the Seabrook Fire Department pursuant to the Seabrook RERP) or an offsite medical treatment facility (Exeter Hospital according to the SSRERP)"[31]

Assuming this had been done, all that could have been revealed would have been personnel weaknesses in performing their duties; again a matter of training.

The third shortfall alleged is that the exercise did not:

> "3) involve the dispatch of any field monitoring teams and monitoring and assessment activities;"[32]

In fact, this was done, see n. 15, supra. But again, assuming it had not been done all that could have been revealed would be personnel errors in carrying out monitoring activities, a matter overcome by training and, thus, not a fundamental flaw.

The final shortfall, according to MAG, was that the exercise did not:

> "4) involve any onsite personnel monitoring and decontamination at the offsite locations planned for that purpose (the Seabrook Dog Track and the 'Warehouse' on Route 107)."[33]

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31 Id.

32 Id.

33 Id.

Again, all that could have been revealed would be personnel errors in carrying out the monitoring and decontamination activities, a matter overcome by training and, thus, not a fundamental flaw.

## IV. THE MOTION FAILS TO COMPLY WITH 10 C.F.R. § 2.714(b)(2) AS AMENDED.

The Motion fails to address the requirements recently added to 10 C.F.R. § 2.714(b) for:

> "(i) A brief explanation of the bases of the contention.
>
> (ii) A concise statement of the alleged facts or expert opinion which support the contention and on which the petitioner intends to rely in proving the contention at the hearing, together with references to those specific sources and documents of which the petitioner is aware and on which the petitioner intends to rely to establish those facts or expert opinion.
>
> (iii) Sufficient information (which may include information pursuant to paragraphs (b)(2)(i) and (ii) of this section) to show that a genuine dispute exists with the applicant on a material issue of law or fact. This showing must include references to the specific portions of the application (including applicant's environmental report and safety report) that the petitioner disputes and the supporting reasons for each dispute, or, if the petitioner believes that the application fails to contain information on a relevant matter as required by law, the identification of each failure and the supporting reasons for the petitioner's belief."[34]

MAG undoubtedly would attempt to justify his failure to comply with 10 C.F.R. § 2.714(b) on the basis of the statement in the Statement of Basis which accompanied the promulgation of the amendments to the Rules of Practice to the effect that the rules concerning contentions would not

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34 54 Fed. Reg. 33180 (August 11, 1989) (emphasis added).

apply to contentions filed in proceedings commenced prior to the effective date of the amendments.[35] Prescinding from the thorny issue of whether a regulation can be made effective but denied general applicability by a statement in the Statement of Basis as opposed to language in an actual regulation, MAG cannot take advantage of this statement. He is estopped from doing so because of his assertion to the Commission just a few weeks earlier, in arguing that possible litigative delay did not warrant exempting Applicants from being required to hold this Exercise, that the new requirements of 10 C.F.R. § 2.714(b) would apply to any contentions filed concerning the Exercise.[36] Having argued to his advantage to the Commission that these "recent rule changes restricting the admissibility of contentions," id., do apply to contentions concerning this Exercise, MAG is estopped from now arguing to this Board that the rules do not apply.[37] And, having admitted that the requirements apply,

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35 54 Fed. Reg. at 33179.

36 Response of Mass. AG to Applicants' Application for an Exemption from the Requirement of 10 C.F.R. Part 50, Appendix E, Section IV.F.1 at 18 (August 21, 1989).

37 Illinois ex rel. Gordon v. Campbell, 329 U.S. 362, 369 (1946); Wilcox Dev. Co. v. First Interstate Bank of Oregon, 590 F.Supp. 445, 452-53 (D. Or. 1984), rev'd on other grounds, 815 F.2d 522 (1987); but see Note, The Doctrine of Preclusion Against Inconsistent Positions in Judicial Proceedings, 59 HARV. L. REV. 1132, 1136 (1946).

MAG's failure even to address them is grounds for the denial of his motion out of hand.[38]

## CONCLUSION

The motion should be denied and the proffered contention excluded.

Respectfully submitted,

Thomas G. Dignan, Jr.
George H. Lewald
Jeffrey P. Trout
Jay Bradford Smith
Geoffrey C. Cook
William L. Parker
Ropes & Gray
One International Place
Boston, MA 02110-2624
(617) 951-7000

*Counsel for Applicants*

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38 See Memorandum and Order (Ruling on Massachusetts Attorney General's Exercise Contentions 8.C.1, 8.C.3, 18, and 21.C) at 12-13 (January 13, 1989), and cases cited therein; see also Georgia Power Company (Vogtle Electric Generating Plant, Units 1 and 2), LBP-86-41, 24 NRC 901, 927-28 (1986), modified, ALAB-859, 25 NRC 23, aff'd, ALAB-872, 26 NRC 127 (1987).

UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION I
475 ALLENDALE ROAD
KING OF PRUSSIA, PENNSYLVANIA 19406

OCT 05 1989

Docket No. 50-443

Public Service Company of New Hampshire
ATTN: Mr. Edward A. Brown
President and Chief Executive Officer
P.O. Box 300
Seabrook, New Hampshire 03874

Gentlemen:

Subject: Inspection Report No. 50-443/89-10

A routine safety inspection of your annual emergency preparedness exercise was conducted by Mr. E. Fox, Jr., of this office and other members of an NRC team on September 26-28, 1989, at your Seabrook Nuclear Power Station, Seabrook, New Hampshire. Discussions of our findings were held by Mr. Fox with you and other members of your staff at the conclusion of the inspection.

Areas examined during the inspection are described in the NRC Region I Inspection Report which is enclosed. Within these areas, the inspection consisted of selective examination of procedures and representative records, interviews with personnel and observation of the emergency exercise by team members.

Within the scope of this inspection, no violations, deviations, or unresolved items were observed. Public Service Company's performance during the exercise demonstrated the ability to implement the Emergency Plan and the Emergency Plan Implementing Procedures in a manner that would provide adequate protective measures for the health and safety of the public.

No reply to this letter is required. Your cooperation with us in this matter is appreciated.

Sincerely,

MR Kay for

Ronald R. Bellamy, Chief
Facilities Radiological Safety and
Safeguards Branch
Division of Radiation Safety and
Safeguards

Enclosure: Region I Inspection Report No. 50-443/89-10

8910180069 2pp "APPENDIX 1"

OCT 05 1989

Public Service Company of 2
New Hampshire

cc w/encl:
J. C. Duffett, President and Chief Executive Officer, PSNH
T. C. Feigenbaum, Chief Operating Officer and Sr Vice President
J. M. Peschelm, Regulatory Services Manager, NHY
D. E. Moody, Station Manager, NHY
P. W. Agnes, Jr., Assistant Secretary of Public Safety, Commonwealth of Massachusetts
Public Document Room (PDR)
Local Public Document Room (LPDR)
Nuclear Safety Information Center (NSIC)
State of New Hampshire
Commonwealth of Massachusetts
Seabrook Hearing Service List
FEMA Region I

U. S. NUCLEAR REGULATORY COMMISSION
REGION I

Report No. 50-443/89-10

Docket No. 50-443

License No. CPPR-135 Priority -- Category C

Licensee: Public Service Co. of New Hampshire
P.O. Box 330
Manchester, New Hampshire 03105

Facility Name: Seabrook Station

Inspection At: Seabrook, New Hampshire

Inspection Conducted: September 26-28, 1989

Inspectors: RJ Summers for 10/2/89
E. F. Fox, Jr., Sr. Emergency Preparedness Specialist, EPS, FRS&SB, DRSS — date

C. Amato, EPS, FRS&SB, DRSS
A. Cerne, SRI, Seabrook Nuclear Power Station
R. Serbu, PEPB, NRR
W. Lazarus, Chief, EPS, FRS&SB, DRSS

Approved by: 10/2/89
W. J. Lazarus, Chief, Emergency Preparedness Section, FRS&SB, DRSS — date

Inspection Summary: Inspection on September 26-28, 1989
(Report No. 50-443/89-10)

Areas Inspected: Routine, announced emergency preparedness inspection and observation of the licensee's partial-participation annual emergency preparedness exercise conducted on September 27, 1989. The inspection was performed by a team of five NRC Region I and headquarters personnel.

Results: No violations, deviations or unresolved items were identified. The licensee's response actions for this exercise demonstrated the ability to implement the emergency plan in a manner which would provide adequate protective measures for the health and safety of the public.

(2) 9pp.

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## DETAILS

### 1.0 Persons Contacted

The following licensee representatives attended the exit meeting held on September 28, 1989.

S. Buchwald, Quality Assurance Supervisor
R. Boyd, Jr., Performance Services Manager
E. Brown, President
A. Callendrello, Manager, Emergency Planning Licensing
P. Casey, Senior Emergency Planner
E. Desmarais, Independent Review Team Manager
B. Drawbridge, Executive Director Nuclear Production
J. Ellis, Manager, Response and Implementation
T. Feigenbaum, Chief Operating Officer and Sr Vice President
T. Grew, Manager, Specialty Training
J. Grillo, Operations Manager
T. Harpster, Director, Licensing Services
J. MacDonald, Radiological Technical Specialist
J. Martin, Manager, Community Relations
D. McLain, Production Services Manager
D. Moody, Station Manager
P. Richardson, Manager, Training
N. Pillsbury, Director, Quality Programs
P. Stroup, Director, Emergency Implementation and Response
W. Sturgeon, Nuclear Services Manager
R. Sweeny, Bethesda Licensing Office Manager
D. Tailleart, Emergency Preparedness Manager
J. Tefft, Lead Engineer
R. Winn, Director, Corporate Communications

During the conduct of the inspection, other licensee emergency response personnel were interviewed and observed.

### 2.0 Emergency Exercise

The Seabrook Station partial-participation exercise of the licensee's on-site Emergency Plan was conducted on September 27, 1989, from 8:00 a.m. until 3:30 p.m. FEMA did not observe. There was limited off-site participation of State of New Hampshire Incident Field Office (IFO) and the licensee's Off-site Response Organization (ORO) to test the interface with the licensee's on-site emergency response personnel.

### 2.1 Pre-exercise Activities

The exercise objectives submitted to the NRC Regior I on June 30, 1989 were reviewed and determined to adequately test the licensee's Emergency Plan. On July 27, 1989, the licensee submitted the complete scenario package for NRC review and evaluation. Region I representatives had telephone conversations with the licensee's emergency preparedness staff to discuss the scope and content of the scenario. As a result, minor revisions were made to the scenario and supporting data provided by the licensee. As this was a partial-participation exercise, it was not necessary to demonstrate off-site

protective actions. It was determined that the scenario would support an adequate partial-participation exercise of the licensee's Emergency Plan and Implementing Procedures. The scenario involved a loss-of-coolant accident which would result in declaration of a Site Area Emergency and would test the licensee's on-site emergency response facilities including the functions of dose assessment, protective action decision-making, and the interface with the State of New Hampshire officials and the ORO, which compensates for the lack of participation by the Commonwealth of Massachusetts. Although a major release of radioactivity was not included in the scenario, the existence of the potential for such a release would force the demonstration of the major areas of the licensee's emergency response organization. NRC observers attended a licensee briefing on September 27, 1989 and participated in the discussion of emergency response actions expected during the scenario. It was agreed that controllers would intercede in exercise activities to prevent scenario deviations or disruption of normal plant operations.

The exercise scenario included the following events:

-- Loss of both emergency diesel generators requiring declaration of an UNUSUAL EVENT;

-- A leak in the reactor coolant system of greater than 50 gallons per minute from the Resistance Temperature Detector (RTD) manifold return line isolation valve requiring declaration of an ALERT;

-- A small break loss-of coolant accident (LOCA) from the RTD manifold requiring declaration of a SITE AREA EMERGENCY.

The above events caused the activation of the licensee's on-site emergency response facilities and demonstration of the interface with the ORO and the State of New Hampshire.

## 2.2 Activities Observed

During the conduct of the licensee's exercise, NRC team members made detailed observations of the activation and augmentation of the emergency response organization, activation of emergency response facilities, and actions of emergency response personnel during the operation of the emergency response facilities. The following activities were observed:

1. Detection, classification, and assessment of scenario events;
2. Direction and coordination of the emergency response;
3. Notification of licensee personnel and off-site agencies;
4. Communications/information flow, and record keeping;
5. Assessment and projection of radiological dose and consideration of protective actions;
6. Provisions for in-plant radiation protection;
7. Performance of off-site and in-plant radiological surveys;
8. Maintenance of site security and access control;
9. Performance of technical support, repair and corrective actions;
10. Assembly and accountability of personnel; and
11. Provisions for communicating information to the public.

3.0 Classification of Exercise Findings

Emergency Preparecness exercise findings are classified as follows:

Exercise Strengths

Exercise strengths are areas of the licensee's response that provide strong positive indication of the ability to cope with abnormal plant conditions and implement the emergency plan and procedures.

Exercise Weaknesses

Exercise weaknesses are areas of the licensee's response in which the performance was such that it could have precluded effective implementation of the emergency plan in the event of an actual emergency in the area being observed. Existence of an exercise weakness does not of itself indicate that the overall response was inadequate to protect the health and safety of the public.

Areas for Improvement

An area for improvement is an area which did not have a significant negative impact on the ability to implement the emergency plan and response was adequate; however it should be evaluated by the licensee to determine if corrective action could improve performance.

4.0 Exercise Observations

The inspectors observed licensee response actions in the emergency response facilities as follows:

Control Room (The licensee's simulator was used)

Several exercise strengths were identified.

1. The shift crew demonstrated alertness and fast response to alarms and indications. For example, the increased leakage from the reactor coolant system was quickly identified and quantified based on decreasing pressurizer level before any alarms were received which would have brought it to the operators' attention.

2. The Shift Supervisor (SS) completed correct preliminary classification of the UNUSUAL EVENT in 2 minutes and announced it as soon as the loss of the second diesel generator was confirmed by the auxiliary operator (total elapsed time of 4 minutes).

3. Notifications of the UNUSUAL EVENT were made to the states within 3 minutes and the NRC within 9 minutes of the classification of the event. Since the exercise involved the use of the simulator control room rather than the actual control room, these times are based on when the operators simulated the use of the "orange"

phone (used for notification of New Hampshire and Massachusetts) and the NRC Emergency Notification System phone in the simulator control room. These emergency phones are not capable of being used from the simulator. In an actual event, the calls are made from phones which are operable in the plant control room.

4. The Shift Supervisor/Shift Technical Advisor (SS/STA) conducted frequent, independent critical safety function checks of the plant.

5. There was excellent communication among the shift personnel.

6. Correct recognition of and adherence to Technical Specification Action Statements were demonstrated.

7. Routine operations and emergency procedure compliance were professional and precise.

8. Good communication was maintained with emergency response personnel outside the control room. An additional licensed operator reported to the control room after the declaration of the ALERT to set up and maintain direct on-line communications with the Technical Support Center (TSC) and Operations Support Center (OSC). This aided in establishing priorities for direction of repair and troubleshooting activities outside the control room.

One area for improvement was brought to the licensee's attention:

The transfer of authority from the Short Term Emergency Director (STED) (Shift Supervisor in the Control Room) to the Site Emergency Director (SED) in the Technical Support Center was not announced on the plant paging system. Although the STED and SED were both clearly aware that the transfer had occurred, announcement of that fact may be beneficial to other emergency response personnel.

Technical Support Center

Several exercise strengths were identified.

1. Appropriate engineering solutions were pursued to correct or mitigate casualties to equipment, including

   Use of both a fire truck and compressed gas cylinders on-site to recharge the emergency diesel generator air bank;

   Use of the site-specific Probabilistic Risk Assessment to identify probable locations of the reactor coolant system leakage and the subsequent small-break LOCA.

2. Additional support was sought from and use was made of Yankee Atomic Service Department to identify the location of the reactor coolant system leakage.

3. Communications were effective and continuous.

4. Effective use was made of status boards which were updated every fifteen minutes. Data relating to Regulatory Guide 1.97 accident variables were trended, including extrapolation of Refueling Water Storage Tank level and interpretation of the trend. Plots were cross correlated.

5. Discussions were held regarding the potential need for protective actions and at what point they would become necessary if conditions worsened.

6. The TSC effectively coordinated OSC personnel to determine plant conditions and effect repairs.

Two areas for improvement were brought to the licensee's attention:

Within the Technical Support Center, two instances of telephone line noise occurred, causing some minor communications problems during the exercise;

Boron concentration curves should be reviewed to verify that they cover all reasonably expected conditions.

Operations Support Center

Several exercise strengths were identified.

1. Excellent command and control was demonstrated.

2. Dispatch of repair teams was timely and proper. Approximately nine (9) teams were used in accordance with repair efforts determined by the TSC.

3. Information from the repair teams, including results of both containment air and reactor coolant samples obtained from the Post Accident Sampling System (PASS) were rapidly provided to decision makers at the TSC and the Emergency Operations Facility.

4. Excellent in-plant radiation protection precautions were instituted and maintained throughout the exercise.

Emergency Operations Facility (EOF)

Several exercise strengths were identified.

1. The EOF was activated promptly and was operated effectively. Actions by response personnel were timely and in accordance with procedures.

2. Coordination and communication with other emergency response facilities including the TSC, ORO, and the New Hampshire IFO were frequent and effective as were communications between the various divisions of the EOF emergency response staff.

3. Technical assessment was clearly in evidence throughout the exercise. Any suspected inconsistencies between various pieces of information were questioned and resolved.

4. Emergency communications (news releases) were effectively prepared, reviewed and approved.

5. Radiation Monitoring Teams were effectively staged, dispatched and directed.

6. Dose assessment capability was promptly established using the backup Hewlett-Packard HP41-CV calculator after the scenario indicated failure of the METPAC system primary, backup, and Yankee Atomic computer systems to force use of the HP41-CV system.

   Several proposals were made which would have quickly restored the METPAC computers to operation, however in order to test the backup, they were prevented from being implemented by the exercise controllers.

   Several "what if" projections were made for potential events with radioactive material releases including steam generator tube rupture, containment venting, and containment failure.

   Field samples were received and promptly counted in accordance with procedures.

   Meteorology was kept current and forecast conditions carefully evaluated. The effect of any potential wind shift on protective action considerations was considered.

7. Effective security was maintained at the EOF. Personnel accountability results were provided to both the EOF and TSC Managers in a timely manner.

8. Possible protective actions were discussed with the ORO and New Hampshire IFO. These discussions were frequent and effective and included the determination of potentially affected areas and consideration of whether school children should be dismissed at

the normal end of the school day or held at school where they could be more easily evacuated if conditions worsened. Conditions considered included plant evolutions such as the switchover from the injection to the recirculation mode and the stability of projected weather conditions.

Field Monitoring Teams

Several exercise strengths were identified.

1. Field monitoring team members arrived at the EOF promptly and effectively prepared for dispatch.

   The teams performed thorough monitoring kit inventory, instrument checks including source checks, portable air sampler checks, radio checks, and vehicle checks in accordance with their procedures.

   Personnel were very knowledgeable of the procedures and demonstrated proficiency and a good understanding of their responsibilities.

   Good radiological practices were followed in the set-up of the vehicle bay used for the dispatch of the teams and receipt of samples.

   Teams were thoroughly briefed on plant conditions and expected radiological conditions prior to dispatch.

   Team members received appropriate dosimetry prior to dispatch.

2. The teams were dispatched promptly (within 50 minutes of arrival at the EOF).

3. Communications between the EOF and the field teams was excellent.

4. Sample counting equipment was set-up promptly.

5. Sample control and analysis including surveys and the use of anti-contamination clothing were effectively demonstrated.

6. A personnel monitoring and decontamination station was established in the vehicle bay, using effective procedures for control of access and egress, installation of floor coverings, use of survey equipment, and manning the control point.

Media Center/Joint Telephone Information Center

Several exercise strengths were identified.

1. Activation, staffing, and command and control were effectively and efficiently accomplished.

2. Information was obtained through authorized officials, and appropriately coordinated and reviewed prior to releasn to the public.

3. Information provided to the public was clear, concise and accurate.

4. Rumor control was effective. Media Center rumor control personnel promptly sought verification of rumors and provided the correct information in all cases.

5. Responses to questions posed by exercise controllers simulating press personnel to media briefers were detailed and understandable.

Overall Conclusions

The NRC team noted that the licensee's activation and augmentation of the emergency organization, activation of the emergency response facilities, and use of the facilities were consistent with their emergency response plan and implementing procedures. No exercise weaknesses were identified.

The licensee demonstrated the ability to implement the emergency plan in a manner which would have provided adequate protection for the health and safety of the public.

5.0 Licensee Critique and Exit Interview

The licensee conducted an adequate self-critique of the exercise. There were no exercise weaknesses identified. Following the licensee's self-critique, the NRC team met with the licensee representatives listed in Section 1 of this report to present exercise observations as detailed in this report.

At no time during this inspection did the inspectors provide any written information to the licensee.

UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

# NRC INSPECTION MANUAL

PRPR

INSPECTION PROCEDURE 82301

EVALUATION OF EXERCISES FOR POWER REACTORS R

PROGRAM APPLICABILITY: 2515 and 2525

82301-01 INSPECTION OBJECTIVES

01.01 To assess the adequacy of the licensee's emergency response program, the implementation of the emergency plan, the emergency implementing procedures, and the training program.

82301-02 INSPECTION REQUIREMENTS

02.01 Evaluate the performance of the licensee's emergency response during an exercise.

a. Verify that the emergency preparedness exercise meets the licensee's commitments and regulatory requirements.

b. Observe the licensee during the exercise for the following functional areas and related activities:

1. Control Room
Assess the performance of the staff as it conducts the tasks listed below:

(a) facility management and control
(b) analysis of plant conditions and corrective actions
(c) detection and classification of emergency events
(d) protective action decisionmaking
(e) notifications and communications
(f) implementation of protective actions
(g) dose assessment
(h) evaluation of post-accident sampling results
(i) dispatch and coordination of monitoring teams

2. Technical Support Center (TSC)
Assess the performance of the staff as it conducts the tasks listed below:

(a) staffing and activation of the TSC
(b) facility management and control
(c) accident assessment and classification

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(d) dose assessment
(e) protective action decisionmaking
(f) notifications and communications
(g) implementation of protective actions
(h) assistance and support to control room
(i) evaluation of post-accident sampling results
(j) dispatch and coordination of monitoring teams

3. Emergency Operations Facility (EOF)
Assess the performance of the staff as it conducts the tasks listed below:

(a) staffing and activation of the EOF
(b) facility management and control
(c) accident assessment and classification
(d) offsite dose assessment
(e) protective action decisionmaking
(f) notifications and communications
(g) implementation of protective actions
(h) interaction with offsite officials, NRC, and other organizations

4. Operational Support Center (OSC)
Assess the performance of the staff as it conducts the tasks listed below:

(a) staffing and activation of the OSC
(b) facility management and control
(c) performance of support functions

5. Corporate Command Center (CCC)
Assess the performance of the staff as it conducts the tasks listed below:

(a) staffing and activation of the CCC
(b) performance of support functions

6. Offsite Monitoring
Assess the performance of the staff as it conducts the tasks listed below:

(a) activation and deployment of the monitoring teams
(b) surveys, sampling and analysis

7. Corrective Action/Rescue Teams
Assess the performance of the staff as it conducts the tasks listed below:

(a) in-plant repair actions
(b) rescue

8. Security/Accountability
Assess the performance of the staff as it conducts the tasks listed below:

(a) security
(b) accountability

9. Emergency News Center (Joint Information Center)
Assess the performance of the staff as it conducts the tasks listed below:

(a) staffing, activation, and facility control
(b) processing and dissemination of information to the media

10. Emergency Medical Services
Assess the performance of the medical response team.

11. Post-Accident Sampling Team (PASS)
Assess the performance of the PASS sample team.

12. Critique
Assess the licensee's critique.

82301-03 INSPECTION GUIDANCE

03.01 General Guidance. The general practices for a team inspection should be utilized in the planning and conduct of this inspection and the preparation of the inspection report. During the exercise, licensee performance in the control room, the TSC, OSC and the EOF should be observed and evaluated. However, consistent with Paragraph C. of Appendix I to Inspection Manual Chapter 2500, the regions may adjust the extent of observation in each area, as needed, to concentrate on areas where past licensee performance was considered marginal or in need of observation.

The exercise is a training tool to prepare for an emergency. It is important to remember that there are three aspects to a successful exercise. The first is the development of a technically accurate and challenging scenario to test the plans, procedures, equipment, and implementation of the exercise. The second part is the implementation of the plans, procedures, and equipment. The last aspect of the exercise is the critique following the exercise in which the licensee makes a candid self-evaluation of the exercise in terms of the scenario; the adequacy of the emergency equipment, facilities, and procedures; the players' responses; and the effective use of the evaluations and the controllers.

The observers or the NRC evaluators should not interfere with the players or the controllers. The controllers also should not prompt, coach, or otherwise interfere with the performance of the players. NRC evaluators may query or seek clarifications or information from the controllers regarding the exercise and/or the scenario.

In assessing the licensee's performance, scenario-related problems should be noted in the inspection report and discussed in the exit meeting.

03.02 Specific Guidance

a. Inspection Requirement 02.01a. The requirement for Emergency Preparedness exercises may be found under 10 CFR Part 50, Appendix E, Part IV.F.I and 10 CFR 50.47(14).

b. Inspection Requirement 02.01b

1. Control Room

(a) Control room operators should be able to correctly interpret control room instrument displays. From these and other sources of available information, they should be able to recognize that events are progressing abnormally, determine plant status and develop appropriate strategies to bring the plant to a safe shutdown condition if necessary. Control room operators should be able to classify the emergency on the basis of plant conditions and confirm, where possible, the emergency classification by dose calculations or monitoring.

(b) After recognizing and classifying the emergency, control room operators should correctly implement the immediate actions of the emergency plan implementing procedures (EPIPs). The shift supervisor should coordinate and oversee the control room response, redirecting the response as necessary. Actions should be performed in accordance with the applicable procedures and instructions.

(c) Control room operators should be able to classify the emergency using emergency action levels (EALs) and determine protective actions for onsite and offsite personnel without waiting for a dose assessment. They should recommend protective actions on site and off site, on a timely basis, that are consistent with those in the approved onsite emergency plan and the EPIPs. Guidance on protective actions is provided in NUREG-0654.

(d) The licensee should consider, to the extent time permits, the following items in promptly deciding upon appropriate offsite protective actions:

(1) current plant status
(2) current dose assessment and dose projection
(3) expected duration of release
(4) evacuation time estimates
(5) local sheltering efficiencies
(6) current meteorological parameters (wind speed, wind directions, and stability class) and projected weather conditions
(7) local geography
(8) time of day

(e) For a Site Area Emergency or a General Emergency, nonessential personnel should be evacuated from the site to the offsite locations(s) specified in the emergency plan and appropriate protective measures should be initiated for those personnel remaining on site (e.g., accountability, protective clothing, KI).

(f) Onsite personnel should be promptly informed of the following:

(1) emergency conditions
(2) emergency classifications
(3) activation of the emergency organization and facilities
(4) protective actions
(5) radioactivity release status
(6) any changes in these conditions

(g) Offsite officials, including NRC, should be promptly informed of the following:

(1) emergency conditions
(2) emergency classifications
(3) activation of the emergency organization and facility
(4) radioactivity release status
(5) potentially affected population
(6) projected population doses
(7) recommended protective actions
(8) any changes in these conditions

A communications link should be maintained between the control room, the TSC, the OSC, and the NRC, if requested. A qualified staff member should be available to notify the licensee and Federal, State, and local authorities of the emergency and to maintain communications 15 minutes after the emergency is declared.

(h) The control room should initiate onsite protective actions until the TSC or the EOF is activated. For a General Emergency with imminent major releases projected, evacuation should be directed without monitoring or decontamination of the onsite nonessential staff. For General Emergencies in which major releases are not imminent, evacuation should be initiated following monitoring and decontamination. The licensee should be able to accomplish the initial accountability within 30 minutes of the order for the assembly of all nonessential personnel and should be able to account for all remaining personnel continuously thereafter. Habitability of the control room and assembly areas should be assessed periodically.

(i) Personnel should use approved procedures for dose assessment and should know how to use them. If a release is anticipated or in progress, control room personnel should be able to correctly and rapidly assess and integrate information from the reactor system's status and trends, source-term assumptions, post-accident sampling system (PASS) samples, and meteorological information to define the magnitude and location of the onsite and offsite impact. These assessments need not be as sophisticated or as accurate as dose projections made by the TSC or the EOF but should be sufficiently accurate for adequate onsite protective actions and offsite protective recommendations as necessary. If a release is under way, personnel should promptly initiate

onsite sampling and monitoring to confirm the composition of the releases (i.e., iodine fraction) and to better define the source term and confirm projected doses. Dose assessment should be performed in the TSC or the EOF once these facilities are activated.

(j) If appropriate, the control room may request that a post-accident containment air or primary water sample be obtained to confirm the composition of any release (i.e., iodine fraction). The results of the samples would be used to redefine or confirm the condition of the reactor, the emergency classification, the source term, and projected doses. Post-accident sampling may be directed from the TSC after this facility has been activated.

(k) If a release is anticipated or in progress, the Emergency Director may deploy teams to perform environmental sampling at appropriate locations to characterize the size, location, and intensity of the plume. The teams could be asked to take measurements of radiation levels, radioiodine or gross beta levels in the air, or to collect samples of water, vegetation and milk to determine the radioactivity concentrations in these samples. Onsite and offsite monitoring may be directed from the TSC or the EOF after these facilities have been activated.

2. Technical Support Center (TSC)

(a) For Alerts, Site Area Emergencies and General Emergencies, the TSC should be activated and prepared to perform the following functions within about 1 hour after the emergency is declared:

(1) Manage site activities.

(2) Provide technical support to reactor operations.

(3) Manage corporate emergency resources. (Monitoring and dose projections are normally transferred to the emergency operations facility (EOF) after it is activated.)

(4) Manage radiological effluent and environs monitoring and dose projections. (These functions are normally transferred to the EOF after it is activated.)

(5) Provide follow-up notification of the emergency to Federal, State, and local emergency response organizations and make recommendations for public protective actions. (This function is normally transferred to the EOF after it is activated.)

(6) Establish and maintain a primary communications link with the control room.

Guidance on the staffing of the TSC can be found in Table 2 of Supplement 1 to NUREG-0737. The licensee's staffing of the TSC can be found in site emergency plans or implementing procedures.

(b) Accident Assessment/Classification. Personnel activating the TSC should be able to adequately and accurately perform the following:

(1) Use EALs, as appropriate, to classify the emergency.

(2) Initially assess and continuously reassess reactor conditions.

(3) Confirm the emergency classification or reclassify the emergency.

(4) Using technical staff and information available from them or from other sources, maintain an overview of the reactor and plant conditions.

(5) Use the results of post-accident sampling or monitoring, as appropriate, to redefine reactor conditions and the emergency classification.

(6) Provide this information to proper personnel (control room, EOF, NRC, offsite authorities, corporate management, etc.).

(c) Dose Assessment. If a release is in progress, TSC personnel should promptly initiate onsite and offsite sampling and monitoring to confirm the composition of the release (i.e., iodine fraction) and to define the source term and projected doses. If a release is anticipated or in progress, TSC personnel should correctly assess and integrate information from the reactor system's status and trends, radiological monitoring, source-term assumptions, and meteorological information to define the magnitude and location of the onsite and offsite impact. TSC personnel should use the results of post-accident sampling and radiological monitoring to redefine projected doses, as appropriate. Approved procedures should be used for dose assessment and personnel should know how to use them.

(d) Protective Action Decisionmaking. As appropriate, TSC personnel should use plant conditions to decide on protective actions for onsite and offsite personnel without waiting for a dose assessment. TSC personnel should promptly recommend protective actions onsite and offsite consistent with the criteria in the approved onsite emergency plan. Within 15 minutes of the classification of General Emergency conditions, TSC personnel (or control room personnel if the TSC is not staffed and functional) should recommend appropriate protective actions to offsite officials. Guidance is provided in NUREG-0654.

The licensee should use the following parameters, to the extent time permits, in deciding upon appropriate protective actions:

(1) current plant status
(2) current dose assessment and dose projection
(3) expected duration of release
(4) evacuation time estimates
(5) local sheltering efficiencies
(6) current meteorological conditions (wind speed, wind direction, and stability classification) and projected weather conditions
(7) local geography
(8) time of day

(e) Notification. The licensee should promptly notify onsite personnel of the following :

(1) emergency conditions
(2) emergency classification
(3) activation of the emergency organization and facility
(4) protective actions
(5) radioactivity release status
(6) any changes in these conditions

(f) Implementation of Protective Actions. The licensee should perform the following tasks:

(1) Confirm that the onsite protective actions above have been implemented.
(2) Direct that all onsite personnel are accounted for.
(3) Confirm that all personnel are accounted for and, if not accounted for, begin search and rescue for missing personnel (initial accountability should be completed within about 30 minutes of the declaration of the emergency). The licensee should also be able to account for onsite personnel continuously thereafter.
(4) Confirm and periodically assess the habitability of the TSC, the OSC, and assembly areas. Functions of the TSC should be transferred to habitable areas if necessary.
(5) Confirm that offsite authorities are aware of the licensee's recommendations for protective actions.
(6) Determine from the offsite authorities what, if any, protective actions are being taken.
(7) Inform management and NRC of these actions.

(g) The TSC coordinator (the person in charge) should oversee the analysis and corrective action response. Actions should be performed in accordance with approved procedures. Performance of other functions should not interfere with direction or determination of corrective action. Corrective actions should be implemented in an effective and timely manner. Potential offsite consequences of corrective actions should be considered and discussed with offsite officials. The resources necessary to perform the required analyses should be available. Those performing the analyses

and making decisions should be aware of important trends or changes of status. Job aids such as status boards should be used effectively and should not interfere with the performance of corrective actions. Those in charge of operations, maintenance, and radiation protection should consult frequently and as necessary with each other and with offsite members of licensee emergency response support organizations (e.g., consultants, corporate personnel, and contractor personnel) about corrective actions.

(h) If appropriate, the licensee should request that post-accident containment air or primary water samples be obtained to confirm the composition of any release (i.e., iodine fraction) and use the results of the post-accident sampling to redefine or confirm the condition of the reactor, the emergency classification, the source term, and projected doses, as appropriate.

(i) If a release is anticipated or is in progress, the licensee should deploy an initial environmental sampling team(s) to appropriate locations to intercept the plume, direct the team(s) regarding geographical movement (e.g., remain at predesignated locations, go to the approximate center, begin a traverse from location to location), direct the teams regarding measurements or samples to be taken (e.g., gross beta (B), air, water, vegetation, milk, TLDs), and use results of monitoring to redefine the source term and projected doses, as appropriate.

(j) Approved plant procedures should be current, readily available and used. TSC personnel should communicate frequently with each other and with other centers, especially with the control room. Congestion and noise levels should be kept to a minimum. All communications systems should be functioning properly. The EOF should be kept informed of the status of the emergency and proper functions should be transferred to the EOF when that facility becomes operational; all concerned parties should be notified of such a transfer. Bound or other [illegible]nt-type logs should be kept and all important data, calculations, notifications, and decisions should be recorded as they occur. Relief personnel should be properly and adequately briefed. Job aids such as status boards, should be accurate and should be kept up to date.

3. Emergency Operations Facility (EOF)

(a) For Site Area Emergencies and General Emergencies, the EOF should be activated and prepared to perform the following functions within about 1 hour after the emergency is declared:

(1) Manage emergency resources (before activation of the EOF, this function may have been initiated at the TSC).
(2) Manage overall radiological effluent and environs monitoring and dose projections. (Before activation of the EOF, this function may have been performed at the TSC.)

(3) Notify Federal, State and local emergency response organizations of the emergency and make recommendations for public protective action (before activation of the EOF, this function may have been initiated at the TSC.)
(4) Establish and maintain a primary communications link with the TSC.
(5) Communicate with NRC Site Team.

Guidance for staffing of the EOF is specified in Table 2 of Supplement 1 to NUREG-0737 and the licensee's staffing is listed in the site emergency plans or implementing procedures. Personnel should not be prepositioned before commencement of the exercise. The personnel performing key functions should be knowledgeable in their duties and responsibilities.

(b) Offsite Dose Assessment. If a release is anticipated or is in progress, the licensee should correctly assess and integrate information from the reactor system's status and trends, radiological monitoring, source-term assumptions, and meteorological information to define the magnitude and location of the offsite impact. If a release is anticipated or in progress, the licensee should deploy an initial environmental sampling team(s) to appropriate locations to intercept the plume, direct the team(s) regarding geographical movement (e.g., remain at a predesignated location, go to the approximate center, begin a traverse from location to location), and direct the team(s) regarding measurements or samples to be taken (e.g., gross b, air, water, vegetation, milk, TLDs). The results of monitoring should be used to redefine the source term and projected doses appropriate. The licensee should be able to promptly and correctly project the direction and maximum dose within the plume EPZ and the distance to which the EPA's PAGs are projected to be exceeded. Licensee staff responsible for protective action recommendations should also communicate with the reactor systems' status personnel to comprehend plant status and trends and anticipate radiological consequences of the progression of events. The licensee should obtain the necessary current and forecasted meteorological information from onsite systems and appropriate offsite sources (e.g., supplemental systems, the National Weather Service). The licensee should assure that assessments are updated as tangible changes in plant status, release, or meteorological conditions become evident, are forecasted, or are refined from confirmatory measurements. Current approved procedures should be used for dose assessment and personnel should know how to use them. A backup dose assessment system should be available if the primary system fails. The staff should be trained in using the alternate system.

(c) Protective Action Decisionmaking. As appropriate, the licensee should assess the status of the reactor core, systems and containment to recommend offsite protective actions without waiting for a dose assessment. (Before activation of the EOF, this function may have been initiated

at the TSC.) The licensee should promptly recommend offsite protective actions that are consistent with those in the approved onsite emergency plan. Guidance on protective measures can be found in Appendix I of NUREG-0654.

The licensee should consider, to the extent time permits, the following items in deciding upon appropriate protective actions:

(1) current reactor and plant status
(2) prognosis of accident
(3) expected duration of release
(4) evacuation time estimates
(5) local sheltering efficiencies
(6) current and projected weather conditions
(7) local geography
(8) time of day

(d) Notification. The licensee should set up and maintain a communications channel to offsite authorities, including the NRC, and (if not already accomplished by TSC or control room personnel), promptly inform offsite officials, including NRC, of:

(1) emergency conditions
(2) emergency classification
(3) radioactivity release status
(4) potentially affected population
(5) projected population doses
(6) recommended protective actions
(7) any changes in these conditions

(e) Implementation of Protective Actions. The licensee should confirm and periodically assess the habitability of the EOF. If the EOF has to be evacuated, its functions should be transferred to alternate facilities without disruption of offsite interaction, command and control, dose projections, or protective action decisionmaking. The licensee should confirm that offsite authorities are aware of the licensee's recommendations for protective actions. The licensee should determine from the offsite authorities what, if any, protective actions are being taken and should inform management and NRC of these actions. The licensee should always be aware or informed of the status of offsite protective actions.

(f) Interaction with Offsite Officials. The offsite representatives at the EOF and the site should be briefed upon arrival and kept informed of changing conditions without interfering with the onsite response. Offsite monitoring and sampling results should be coordinated with offsite officials.

(g) The plant procedures used should be current, readily available and approved. EOF personnel should communicate frequently with each other and with other centers (especially with corporate headquarters and with offsite

authorities). Congestion and noise levels should be kept to a minimum. All primary communications systems should function properly and if they do not, backup systems should be available. Proper functions should be transferred to the EOF in a timely manner when that facility becomes operational. All concerned parties should be notified of such a transfer. Bound or other permanent-type logs should be kept and all important data, calculations, notifications, and decisions should be recorded chronologically. Relief personnel should be properly and adequately briefed. The EOF should be properly equipped to perform its functions. Job aids such as status boards, should be accurate and should be kept up to date. At the request of personnel in the TSC, the control room, or elsewhere, outside resources should be obtained in a timely manner.

4. Operational Support Center (OSC)

(a) The OSC should be quickly staffed, activated, and fully functional. Operations at the OSC should be supervised by licensee officials predesignated in the emergency plan and procedures. The licensee's personnel assigned to the OSC should be identified in the Emergency Plan and/or the implementing procedures. The manager-in-charge should be knowledgeable of his or her duties and responsibilities. Reliable voice communication should be established with the control room, the TSC, and the EOF. Habitability of the OSC should be confirmed and periodically assessed and, if need be, its functions should be transferred to a habitable area. For conditions requiring iodine protection, personnel should promptly implement appropriate iodine-protective measures (use appropriate respiratory protection or take KI). Guidance on staffing is presented in Table 2 of Supplement 1 to NUREG-0737.

(b) Congestion and noise levels should be kept to a minimum. All primary communications systems to the TSC, the EOF and the repair teams should function properly and if they do not, backup systems should be available. Relief personnel should be properly and adequately briefed. Periodically, the OSC staff should be briefed on plant and radiological conditions. The OSC should be properly equipped to perform its functions. Teams dispatched from the OSC should be briefed, tracked, and debriefed upon return to the OSC. Communication with the teams should be maintained. Personnel who will perform specific tasks as requested by management, the TSC, or the control room should be assigned in a timely manner and should be given clear instructions. A pre-implementation planning meeting involving operations, maintenance, and health physics should be held to reduce exposure by means of appropriate tool selections, routes of travel, development of temporary procedures, etc. (These actions may be performed in the TSC or the control room.) Exposure and exposure limits of personnel should be considered in planning actions. (These actions may be performed in the TSC or the control room.)

5. Corporate Command Center (CCC)

(a) If called for in the emergency plan or procedures, the Corporate Command Center should be activated and prepared to perform its functions in a timely manner. Reliable voice communications should be established with the site (primarily the EOF). Licensee officials should be predesignated in the emergency plan or related procedures to manage operations. The senior manager should be knowledgeable of his or her duties and responsibilities and able to perform his or her functions.

(b) When called upon for assistance, the CCC should provide timely support in such areas as Government liaison, logistics, and finance. Congestion and noise levels should be kept to a minimum. The CCC should be properly equipped to perform its functions.

6. Offsite Monitoring

(a) Licensee staff capable of performing offsite surveys should be prepared to implement their functions in a timely manner. Monitoring teams should be dispatched in a timely manner. Personnel should not be prepositioned before commencement of the exercise.

(b) Team members should be able to demonstrate proficient use of protective measures equipment such as respiratory protection. Teams should be able to quickly locate sampling and monitoring locations (for example, predetermined sample sites). Team members should exhibit proficiency in collecting, bagging, and marking samples, and in reading monitoring results in accordance with procedures (e.g., open and closed G.M. window readings). Team members should keep track of their individual exposures. Teams should be adequately briefed on radiation conditions, their mission, and plant conditions before they are dispatched and should be kept informed of changing conditions in the field. Vehicles should be available and readily accessible to transport the teams and should be capable of functioning under adverse weather conditions. Calibrated instrumentation and equipment should be available for monitoring and for taking samples. Instrumentation to detect radioiodine at levels as low as 10-7 mCi/cc under field conditions should be available. Teams should be equipped with an adequate communications system (e.g., a radio that permits unimpeded transmission and reception of data and instructions over the entire plume emergency planning zone (EPZ)). Monitoring results should be promptly and correctly reported to the TSC and/or the EOF.

7. Corrective Action or Rescue Teams. Team actions should be initiated and performed promptly following the decision to conduct the operation. Before entry, the team should consult and coordinate with the control room, and should be briefed on potential hazards. The team should be provided with adequate protective equipment such as self-contained breathing apparatus

(SCBA) with sufficient stay times, and monitoring equipment with sufficient range (e.g., up to 1000 R/hour). Team exposure, monitored constantly should not exceed guidelines or preestablished values. Communication with the team should be maintained by the control room, the TSC, or the OSC. The team personnel should be qualified by training or experience to perform the specified job in a high radiation environment, and they should be trained in the use of the appropriate protective equipment. Team personnel should be able to demonstrate proficiency in the use of protective equipment.

8. Security and Accountability

(a) Access control should be maintained at the site and should not interfere with the response to an emergency (e.g., response of offsite assistance should not be hindered). Security practices or procedures should not impede movement and access of site operating and response personnel to plant areas during an emergency situation (e.g., computer-controlled doors to vital areas fail in the open position upon loss of electrical power, essential personnel have keys to locked doors or can easily obtain keys, anti-passback features do not hinder reentry). Any practice or procedure to allow easy access during emergencies must be compatible with the licensee's Physical Security and Contingency Plans developed in accordance with 10 CFR Part 73 and 10 CFR 73, Appendix C. Access control should be maintained at the control room, the OSC, the TSC, and the EOF. Security personnel exposure should be monitored and appropriate protective actions should be taken.

(b) All onsite personnel should be accounted for and the names of missing individuals should be achieved within about 30 minutes of the declaration of a Site Area Emergency or a General Emergency. A search-and-rescue operation should be initiated promptly for missing people. All onsite personnel should be continuously accounted for during the emergency response.

9. Emergency News Center (Joint Information Center)

(a) Information should be disseminated to the media/press in an accurate and timely manner. News releases should be properly coordinated with the NRC and other offsite officials. Media personnel should be prohibited from interfering with the emergency response. Corrected or supplemental information should be promptly released in the event of error or misinformation in news stories (e.g., rumor control). Information given to the public should be prepared to the technical level that the public can understand. News should be updated periodically whether or not the status has changed.

(b) Adequate numbers of telephones should be available for press use. Personnel giving the briefings should be technically qualified and able to answer media questions accurately and quickly.

10. Emergency Medical Services

(a) Preparation and Implementation of First Aid, Medical Transportation, and Hospital Assistance. For a life-threatening injury, first aid should be given and victims transported before decontamination. Generally, the victim should be decontaminated before first aid and hospital care are given. Personnel, vehicles, and equipment possibly contaminated should be controlled. Hospital personnel should be briefed and trained in radiation protection and contamination control.

(b) Communications should be maintained between the emergency vehicle and the hospital. All transmissions to the hospital from the emergency vehicle should be preceded by an announcement such as "This is a drill." A qualified radiological control technician should accompany the injured person to the hospital. Hospital personnel should be adequately briefed by the radiological control technician on the extent of the injury and on contamination levels.

11. Post-Accident Sampling Team. When the licensee conducts post-accident analysis of the primary coolant and containment atmosphere, appropriate exposure limits for the in-plant team operations should be maintained. The team should be qualified and capable to take and analyze coolant and containment atmosphere samples under emergency conditions. The team should be able to proficiently implement the post-accident sampling procedure, wear, or simulate the wearing of, the appropriate protective equipment (e.g., SCBA), and follow the appropriate radiation protection procedures. Appropriate tools should be used, and samples should be properly transported. Samples should be analyzed using the appropriate precautions to prevent personnel exposure and contamination of the lab. Samples should be analyzed for the following: noble gases, iodine, cesium, nonvolatile isotopes, hydrogen, chlorides, and boron. The results from these analyses should be available in the TSC within about 3 hours of taking the samples.

12. Critique. At the end of the exercise, each facility should hold a critique with the controllers and players while the details are fresh. This preliminary critique should be followed by a formal critique that evaluates the overall performance of the exercise and the interaction of facility representatives and players with one another. During the critique, the evaluators should provide an unbiased and candid evaluation of the exercise, identifying the areas of strength as well as weakness and areas needing improvement. Corrective actions should be defined and scheduled.

82301-04 RESOURCES

The estimated direct onsite time to complete this inspection is provided below:

| Inspection Type | Staff Hours Per Site |
|---|---|
| Regional Team Leader | 28 |
| Resident Inspector | 12 |
| Headquarters Observer* | 14 |

Thus for planning purposes, the total estimated direct onsite inspection time to complete this inspection is 54 hours.

*The inspection effort expended by headquarters observers is separate from regional budget allocations. Because they are available to observe only one half of the exercises conducted, an overall average of their time was estimated.

82301-05 REFERENCES

ANSI/ANS 3.1-1981, "Selection, Qualification, and Training of Personnel for Nuclear Power Plants" (supersedes ANSI N18.1-1977-77).

EPA-520/1-75-001, "Manual of Protective Action Guides and Protective Actions for Nuclear Incidents," Revision 1, June 1980.

NUREG-0396, "Planning Basis for the Development of State and Local Government Radiological Emergency Response Plans in Support of Light-Water Nuclear Power Plants," December 1978.

NUREG-0654, "Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants," Revision 1, November 1980.

NUREG-0696, "Functional Criteria for Emergency Response Facilities," February 1981.

NUREG-0731, "Guidelines for Utility Management Structure and Technical Resources," September 1980.

NUREG-0737, "Clarification of TMI Action Plan Requirements," November 1980; Supplement 1 (Generic Letter 82-33), December 17, 1982.

Regulatory Guide 1.97, "Instrumentation for Light-Water, Cooled Nuclear Power Plants To Assess Plant and Environs Conditions During and Following an Accident," Revision 3, November 1980.

Regulatory Guide 1.101, Revision 2, "Emergency Planning and Preparedness for Nuclear Power Reactors," October 1981.

END

CERTIFICATE OF SERVICE

I, Thomas G. Dignan, one of the attorneys for the Applicants herein, hereby certify that on October 11, 1989, I made service of the within document by depositing copies thereof with Federal Express, prepaid, for delivery to (or, where indicated, by depositing in the United States mail, first class postage paid, addressed to):

Administrative Judge Ivan W. Smith
Chairman, Atomic Safety and Licensing Board
U.S. Nuclear Regulatory Commission
East West Towers Building
4350 East West Highway
Bethesda, MD 20814

Adjudicatory File
Atomic Safety and Licensing Board Panel Docket (2 copies)
U.S. Nuclear Regulatory Commission
East West Towers Building
4350 East West Highway
Bethesda, MD 20814

Administrative Judge Richard F. Cole
Atomic Safety and Licensing Board
U.S. Nuclear Regulatory Commission
East West Towers Building
4350 East West Highway
Bethesda, MD 20814

Robert R. Pierce, Esquire
Atomic Safety and Licensing Board
U.S. Nuclear Regulatory Commission
East West Towers Building
4350 East West Highway
Bethesda, MD 20814

Administrative Judge Kenneth A. McCollom
1107 West Knapp Street
Stillwater, OK 74075

Mitzi A. Young, Esquire
Edwin J. Reis, Esquire
Office of the General Counsel
U.S. Nuclear Regulatory Commission
One White Flint North, 15th Fl.
11555 Rockville Pike
Rockville, MD 20852

John P. Arnold, Esquire
Attorney General
George Dana Bisbee, Esquire
Assistant Attorney General
Office of the Attorney General
25 Capitol Street
Concord, NH 03301-6397

Diane Curran, Esquire
Andrea C. Ferster, Esquire
Harmon, Curran & Tousley
Suite 430
2001 S Street, N.W.
Washington, DC 20009

*Atomic Safety and Licensing Appeal Board
U.S. Nuclear Regulatory Commission
Washington, DC 20555

Robert A. Backus, Esquire
116 Lowell Street
P. O. Box 516
Manchester, NH 03105

Philip Ahrens, Esquire
Assistant Attorney General
Department of the Attorney General
Augusta, ME 04333

Paul McEachern, Esquire
Shaines & McEachern
25 Maplewood Avenue
P.O. Box 360
Portsmouth, NH 03801

Chairman
Board of Selectmen
95 Amesbury Road
Kensington, NH 03833

*Senator Gordon J. Humphrey
U.S. Senate
Washington, DC 20510
(Attn: Tom Burack)

*Senator Gordon J. Humphrey
One Eagle Square, Suite 507
Concord, NH 03301
(Attn: Herb Boynton)

Mr. Thomas F. Powers, III
Town Manager
Town of Exeter
10 Front Street
Exeter, NH 03833

H. Joseph Flynn, Esquire
Office of General Counsel
Federal Emergency Management Agency
500 C Street, S.W.
Washington, DC 20472

Gary W. Holmes, Esquire
Holmes & Ells
47 Winnacunnet Road
Hampton, NH 03842

Mr. J. P. Nadeau
Selectmen's Office
10 Central Road
Rye, NH 03870

John Traficonte, Esquire
Assistant Attorney General
Department of the Attorney General
One Ashburton Place, 19th Fl.
Boston, MA 02108

Mr. Calvin A. Canney
City Manager
City Hall
126 Daniel Street
Portsmouth, NH 03801

R. Scott Hill-Whilton, Esquire
Lagoulis, Hill-Whilton & Rotondi
79 State Street
Newburyport, MA 01950

Barbara J. Saint Andre, Esquire
Kopelman and Paige, P.C.
77 Franklin Street
Boston, MA 02110

Mr. William S. Lord
Board of Selectmen
Town Hall - Friend Street
Amesbury, MA 01913

Judith H. Mizner, Esquire
79 State Street, 2nd Floor
Newburyport, MA 01950

Richard A. Hampe, Esquire
Hampe and McNicholas
35 Pleasant Street
Concord, NH 03301

Mr. Richard R. Donovan
Federal Emergency Management
Agency
Federal Regional Center
130 228th Street, S.W.
Bothell, Washington 98021-9796

Ashod N. Amirian, Esquire
145 South Main Street
P.O. Box 38
Bradford, MA 01835

Thomas G. Dignan, Jr.

(*=Ordinary U.S. First Class Mail)