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Pages 57-128

# NUCLEAR REGULATORY COMMISSION ISSUANCES

August 1990



**U.S. NUCLEAR REGULATORY COMMISSION**

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Vol. 32, No. 2  
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# NUCLEAR REGULATORY COMMISSION ISSUANCES

August 1990

This report includes the issuances received during the specified period from the Commission (CLI), the Atomic Safety and Licensing Appeal Boards (ALAB), the Atomic Safety and Licensing Boards (LBP), the Administrative Law Judge (ALJ), the Directors' Decisions (DD), and the Denials of Petitions for Rulemaking (DPRM).

The summaries and headnotes preceding the opinions reported herein are not to be deemed a part of those opinions or have any independent legal significance.

**U.S. NUCLEAR REGULATORY COMMISSION**

Prepared by the  
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Christine N. Kohl, Chairman  
Alan S. Rosenthal  
Dr. W. Reed Johnson  
Thomas S. Moore  
Howard A. Wilber  
G. Paul Boltwerk, III

APPEAL BOARDS



UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

ATOMIC SAFETY AND LICENSING APPEAL BOARD

Administrative Judges:

G. Paul Bollwerk, III, Chairman  
Alan S. Rosenthal  
Howard A. Wilber

In the Matter of

Docket Nos. 50-443-OL  
50-444-OL  
(Offsite Emergency  
Planning Issues)

PUBLIC SERVICE COMPANY OF  
NEW HAMPSHIRE, *et al.*  
(Seabrook Station, Units 1  
and 2)

August 20, 1990

The Appeal Board affirms the Licensing Board's determination in LBP-89-17, 29 NRC 519 (1989), that the applicants' emergency warning system for the Massachusetts portion of the Seabrook plume exposure pathway emergency planning zone (EPZ) is in compliance with applicable regulatory requirements and guidance.

**EMERGENCY PLANNING: PUBLIC NOTIFICATION**  
**EMERGENCY PLAN(S): CONTENT (NOTIFICATION);**  
**NOTIFICATION REQUIREMENTS**

An offsite emergency response plan must establish "means to provide early notification and clear instruction to the populace within the plume exposure pathway [EPZ]." 10 C.F.R. § 50.47(b)(5). Moreover, subsequent to the time state and local government officials are notified of a situation that requires

urgent action, "[t]he design objective of the prompt public notification system shall be to have the capability to essentially complete the initial notification of the public within the . . . EPZ within about 15 minutes." 10 C.F.R. Part 50, Appendix E, § IV.D.3. See also NUREG-0654/FEMA-REP-1 (Rev. 1), "Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants" (Nov. 1980), Appendix 3 (hereafter NUREG-0654).

#### **EMERGENCY PLANNING: PUBLIC NOTIFICATION**

##### **EMERGENCY PLAN(S): CONTENT (NOTIFICATION); NOTIFICATION REQUIREMENTS**

A proper warning system should consist of two separate components: (1) an "alerting signal" and (2) "notification by commercial broadcast (e.g., EBS)." NUREG-0654, App. 3, at 3-3. The "broadcast notification" component fulfills the regulatory requirement that the warning system provide the means for "clear instruction" to the public. See 10 C.F.R. § 50.47(b)(5).

#### **EMERGENCY PLANNING: PUBLIC NOTIFICATION**

##### **EMERGENCY PLAN(S): CONTENT (NOTIFICATION); NOTIFICATION REQUIREMENTS**

The term "initial notification" as incorporated in the "about 15 minute" requirement in 10 C.F.R. Part 50, Appendix E, § IV.D, was intended only to encompass completion of the signal that notifies the public that a radiological emergency exists so that they should take appropriate action to seek additional information (e.g., by tuning to a prescribed emergency broadcast station).

#### **REGULATIONS: INTERPRETATION**

##### **REGULATORY GUIDES: APPLICATION**

#### **EMERGENCY PLANNING: PUBLIC NOTIFICATION**

##### **EMERGENCY PLAN(S): CONTENT (NOTIFICATION); NOTIFICATION REQUIREMENTS**

Appendix E to 10 C.F.R. Part 50 is the only regulatory timing requirement for warning systems, as such, it — not the NUREG-0654 guidance — is the standard with which applicants' warning system must comply. See, e.g., *Long Island Lighting Co.* (Shoreham Nuclear Power Station, Unit 1), ALAB-900, 28 NRC 275, 290, review declined, CLI-88-11, 28 NRC 603 (1988).

## **REGULATORY GUIDES: APPLICATION**

That regulatory guidance should be somewhat more demanding than a regulatory requirement is not untoward as it acts to assure compliance with the regulatory requirement.

## **EMERGENCY PLANNING: PUBLIC NOTIFICATION**

### **EMERGENCY PLAN(S): CONTENT (NOTIFICATION); NOTIFICATION REQUIREMENTS; FEMA VIEWS**

Given the difference in language of NUREG-0654, App. 3, declaring that a warning system should include the "[c]apability for providing both an alert signal and an informational or instructional message . . . within 15 minutes" and the language of 10 C.F.R. Part 50, Appendix E, § IV.D.3, that the system have "the capability to essentially complete the initial notification of the public . . . within about 15 minutes" (emphases supplied), additional FEMA guidance requiring only that the siren signal and EBS message be activated (as opposed to completed) "within 15 minutes" is in conformity with the NUREG-0654 guidance.

## **EMERGENCY PLANNING: EMERGENCY PLANNING ZONE (SIZE)**

### **EMERGENCY PLANS: EMERGENCY PLANNING ZONE (SIZE)**

EPZ boundaries are to be drawn to conform generally to political jurisdictions rather than strictly at a radius of ten miles from the facility. *See Long Island Lighting Co.* (Shoreham Nuclear Power Station, U.S. v. LIC), CLI-87-12, 26 NRC 383, 395 (1987).

## **EMERGENCY PLANNING: PUBLIC NOTIFICATION**

### **EMERGENCY PLAN(S): CONTENT (NOTIFICATION); NOTIFICATION REQUIREMENTS**

While a warning system should assure direct coverage of essentially 100% of the population within five miles of the site within fifteen minutes, there is some flexibility in terms of the percentage of population coverage that must be obtained by the warning system for remote, low population areas at a distance of more than five miles from the facility. NUREG-0654, Appendix 3, Criteria B.2.b and c; *see* FEMA Guidance Memorandum AN-1, "FEMA Action to Qualify Alert and Notification Systems Against NUREG-0654/FEMA-REP-1



and FEMA-REP-10" (Apr. 21, 1987), Attach. I, at 1-2 to -3. This flexibility, however, does not sanction a warning system whose design fails to provide an alert signal and an informational/instructional message to more populated areas throughout the entire EPZ, including the five to ten mile portion, within fifteen minutes.

#### APPEARANCES

**John Traficonte**, Boston, Massachusetts (with whom **Allan R. Fierce**, **Leslie B. Greer**, **Matthew T. Brock**, and **Pamela Talbot**, Boston, Massachusetts, were on the brief), for the intervenor James M. Shannon, Attorney General of Massachusetts.

**Thomas G. Dignan, Jr.**, Boston, Massachusetts (with whom **George H. Lewald**, **Kathryn A. Selleck**, **Jeffrey P. Trout**, **Jay Bradford Smith**, **Geoffrey C. Cook**, **William Parker**, and **Barbara Moulton**, Boston, Massachusetts, were on the brief), for the applicants Public Service Company of New Hampshire, *et al.*

**Mitzi A. Young** (with whom **Edwin J. Reis**, **Richard G. Bachmann**, **Elaine I. Chan**, **Sherwin E. Turk**, and **Lisa B. Clark** were on the brief) for the Nuclear Regulatory Commission staff.

#### DECISION

As part of the pending appeals from the Licensing Board's final disposition of emergency planning issues relating to the Seabrook Station, the Massachusetts Attorney General (MassAG) has contested a Board determination, LBP-89-17,<sup>1</sup> concerning the efficacy of various aspects of the applicants' emergency warning system for the Massachusetts portion of the facility's plume exposure pathway emergency planning zone (EPZ). Because the subject matter of this portion of his appeal is related to that involved in a rejected motion to reopen from which

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<sup>1</sup> 29 NRC 519 (1989). The MassAG previously sought to appeal this June 1989 decision. In an August 1, 1989 unpublished order, we dismissed his initial notice of appeal, holding that any review of LBP-89-17 must await a final determination on emergency planning matters. This occurred with the Licensing Board's November 1989 ruling that emergency planning for the Massachusetts portion of the Seabrook EPZ and the June 1988 full-scale emergency planning exercise were adequate to comply with emergency planning requirements so that the Seabrook full-power license should be authorized. See LBP-89-32, 30 NRC 375 (1989), *appeals pending*. The MassAG subsequently renewed his challenge to LBP-89-17 in a timely notice of appeal.

the MassAG took a separate appeal and upon which we rule today,<sup>2</sup> we now address his challenges to the particulars of the Licensing Board's decision on the emergency warning system as well.

## I.

The emergency warning system to be employed for the Massachusetts portion of the Seabrook EPZ has been labeled the Prompt Alert and Notification System, or PANS.<sup>3</sup> Like so many other aspects of emergency planning relating to Seabrook, it reflects the unique circumstances surrounding this facility. Following a December 1987 judicial indication that the Town of West Newbury, Massachusetts, was within its prerogatives to order the removal of pole-mounted warning sirens located within its jurisdiction, applicants decided to abandon entirely the use of such sirens within the Massachusetts portion of the EPZ.<sup>4</sup> As a replacement, applicants established a system referred to as the Vehicle Alert Notification System, or VANS.

Under VANS, applicants will retain in excess of 100 workers to staff, on a twenty-four-hour basis, a fleet of trucks upon which warning sirens have been mounted.<sup>5</sup> In the event of a radiological emergency at Seabrook, a truck will be dispatched from one of six staging areas to each of sixteen predetermined activation locations.<sup>6</sup> Immediately upon arrival at the assigned activation site, the truck driver will start a hydraulic mechanism that extends a telescopic boom holding the siren, enabling it to reach a height of at least forty-five feet.<sup>7</sup> Once a siren has reached an elevation of at least twenty-five feet, transmission of the appropriate control signal by emergency response authorities will cause it to sound for three minutes.<sup>8</sup> Each siren's warbling call is intended to alert the public in the vicinity of the activation site of the existence of an emergency situation at Seabrook about which they should seek further information.

At the same time the sirens are sounded, the other main PANS component, the emergency broadcast system (EBS) utilized by applicants, is activated.

<sup>2</sup> See ALAB-936, 32 NRC 75 (1990).

<sup>3</sup> A comprehensive description of the PANS is found in a system design report prepared by applicants for review by the Federal Emergency Management Agency (FEMA). See Applicants' Exh. 11-A (Seabrook Station Public Alert and Notification System FEMA-REP-10 Design Report (Apr. 30, 1988)); Applicants' Exh. 11-B (Seabrook Station Public Alert and Notification System FEMA-REP-10 Design Report (Addendum 1, Oct. 14, 1988)).

<sup>4</sup> See ALAB-883, 27 NRC 43, 46-47, vacated in part on other grounds, CLI-88-8, 28 NRC 419 (1988).

<sup>5</sup> See Applicants' Direct Testimony Regarding Remaining Prompt Alert and Notification System Issues, fol. Tr. 75, at 21-22 [hereinafter Applicants' Direct Testimony]; Tr. 254.

<sup>6</sup> Applicants' Exh. 11-A at 2-5.

<sup>7</sup> See Applicants' Exh. 11-B at 2-7, -12. Although the full extension height for the VANS sirens will be approximately 51 feet, the sound coverage analysis for the system was conservatively conducted for a siren height of 45 feet. See *id.* at 2-12; Tr. 155-57.

<sup>8</sup> Tr. 88; see Applicants' Exh. 11-A at 2-17. See also *infra* note 53.

This system is to provide the public in the Massachusetts portion of the EPZ with information about the emergency condition and protective action instructions. As that system is designed, after receiving authorization from utility emergency response officials (who have, in turn, consulted with State officials), the local radio stations with which the applicants have an agreement to transmit EBS messages will begin broadcasting.<sup>9</sup> Their initial transmission consists of an eight-second message informing listeners that what ensues is not a system test, followed by a twenty-two second announcement advising what local communities are affected by the emergency condition, and then a twenty-five second tone alert signal.<sup>10</sup> Immediately after this initial fifty-five second period, in accordance with the directions of emergency response officials, the stations will broadcast an informational and instructional message detailing the nature of the emergency and recommended protective actions.<sup>11</sup> The length of this message varies with the emergency situation, but the Licensing Board, on the basis of its own timing of the proposed prerecorded EBS messages, found that the longest English-language message would last approximately two minutes and thirty-eight seconds.<sup>12</sup>

Two issues relating to applicants' warning system were litigated before the Licensing Board: (1) whether the sound level of the VANS sirens will be too high; and (2) whether the public will be warned quickly enough. With respect to the sound magnitude issue, on the basis of the testimony adduced during a two-day hearing, the Board found that while there could be instances of deviation from the guidance on sound levels set forth in NUREG-0654/FEMA-REP-1 (NUREG-0654),<sup>13</sup> the sound levels are acceptable because of the short duration of the overage and the limited number of areas where building sound reflection would exceed guidance levels.<sup>14</sup> The MassAG does not challenge this finding.

The MassAG does, however, contest the Licensing Board's findings relative to the second issue of "timely" notification.<sup>15</sup> In addressing this matter, the Board — as do we — first canvassed the regulatory requirements and guidance applicable to apprising the public of an emergency event at a nuclear facility.<sup>16</sup>

In assessing the adequacy of applicants' emergency warning system, of central concern is 10 C.F.R. § 50.47(b)(5), which provides that an offsite

<sup>9</sup> Applicants' Exh. 11-A at 1-2, -4; see Tr. 132-38.

<sup>10</sup> Tr. 144, 147.

<sup>11</sup> Thereafter, the emergency broadcast communication is repeated twice. See Tr. 151.

<sup>12</sup> LBP-89-17, 29 NRC at 532; Tr. 285-86. The operation of the EBS utilized by applicants also is discussed in ALAB-936.

<sup>13</sup> NUREG-0654/FEMA-REP-1 (Rev. 1), "Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants" (Nov. 1980), App. 3, at 3-8.

<sup>14</sup> LBP-89-17, 29 NRC at 524-26.

<sup>15</sup> Brief of the [MassAG] in Support of His Appeal of LBP-89-32 (Jan. 24, 1990) at 87-92 [hereinafter MassAG Brief].

<sup>16</sup> LBP-89-17, 29 NRC at 527-29.



emergency response plan must establish "means to provide early notification and clear instruction to the populace within the plume exposure pathway [EPZ]." Also of major significance is the implementing proviso of 10 C.F.R. Part 50, Appendix E, § IV.D.3, which requires that, subsequent to the time state and local government officials are notified of a situation that requires urgent action, "[t]he design objective of the prompt public notification system shall be to have the capability to essentially complete the initial notification of the public within the plume exposure pathway EPZ within about 15 minutes." Of final note are the applicable criteria in NUREG-0654, the emergency planning guidance directive issued jointly by the Commission and the Federal Emergency Management Agency (FEMA). Appendix 3 of NUREG-0654, which addresses specifically the means for providing prompt emergency warning to the public, states in pertinent part:

*B. Criteria for Acceptance*

1. Within the plume exposure EPZ the system shall provide an alerting signal and notification by commercial broadcast (e.g., EBS) plus special systems such as [National Oceanographic and Atmospheric Administration] radio. . . .
2. The minimum acceptable design objectives for coverage by the system are:
  - a) Capability for providing both an alert signal and an informational or instructional message to the population on an area wide basis throughout the 10 mile EPZ, within 15 minutes.
  - b) The initial notification system will assure direct coverage of essentially 100% of the population within 5 miles of the site.
  - c) Special arrangements will be made to assure 100% coverage within 45 minutes of the population who may not have received the initial notification within the entire plume exposure EPZ.<sup>17</sup>

In interpreting these various provisions, the Licensing Board declared that the focus of Appendix E, § IV.D.3, "on *capability* means to us a practical realization that the system must be able to comply with the regulations but that no system can guarantee results regardless of events" and that "[t]he use of the words 'essentially complete' and 'about' also indicates to us the appropriateness of some flexibility in interpretation."<sup>18</sup> The Board nonetheless found that this "flexibility does not . . . permit us to exclude the notification of the public, through an EBS system message, from the elapsed time. Based on both the regulations and the guidance, we interpret the regulation to include *both* alerting and notification of the public within the 'about 15 minutes' time period."<sup>19</sup>

<sup>17</sup> NUREG-0654, App. 3, at 3-3.

<sup>18</sup> LBP-89-17, 29 NRC at 527 (emphasis in original).

<sup>19</sup> *Ibid.* (emphasis in original).

Moreover, the Board rejected additional FEMA guidance indicating that agency would consider compliance with NUREG-0654, Appendix 3, Criterion B.2, had been attained during emergency planning exercises if, within fifteen minutes of system activation, the siren signal is triggered and an instructional/informational message is "on the air."<sup>20</sup> Instead, the Board interpreted the NUREG-0654 guidance "to require sequential alerting and notification since people will not know to receive the EBS notification until after they have heard the siren alerting signal."<sup>21</sup>

With this interpretation as its decisional basis, the Licensing Board went on to analyze each discrete element in the alerting and notification process, from the time of the decision to activate the VANS through the broadcast of the EBS message. It found these elements include: (1) the time to alert the VANS operators ("Alert" time); (2) the time for the VANS operators to get under way ("Dispatch" time); (3) the transit time to the activation site ("Route Transit" time); (4) the time to set up equipment at the activation site ("Setup" time); (5) the period during which the sirens operate ("Siren Sounding" time); and (6) the time for the public to tune to an EBS station and receive verbal instructions ("Tuning and Message" time).<sup>22</sup> Of these components, the Board concluded that only one, "Route Transit" time, is a variable with respect to individual activation sites; therefore, the remaining time elements were treated as a constant quantity in determining the overall warning time.<sup>23</sup>

Regarding the final timing elements of "Siren Sounding" and "Tuning and Message," however, based upon its reading of the regulations and guidance described above, the Board concluded that, "[u]ntil a person hears both the siren and the message, the person is not informed of the appropriate action to take."<sup>24</sup> In this light, the Board declared it appropriate to "add the length of time for the EBS message to all the previous times involved, so that those hearing the siren near the end of its sounding will have time to hear the EBS message."<sup>25</sup> On this basis, the Board found that at half of the sixteen siren activation sites, alert and notification times would be in excess of eighteen minutes and at three of the seven sites within five miles of the facility, the times would be in excess of nineteen minutes.<sup>26</sup> The Board held that "[u]nder all the circumstances of this

<sup>20</sup> FEMA Guidance Memorandum AN-1, "FEMA Action to Qualify Alert and Notification Systems Against NUREG-0654/FEMA-REP-1 and FEMA-REP-10" (Apr. 21, 1987), Aitzech, I, at 1-4 [hereinafter FEMA Guidance Memorandum AN-1].

<sup>21</sup> LBP-89-17, 29 NRC at 529.

<sup>22</sup> *Id.* at 529-33.

<sup>23</sup> *Id.* at 533 (Table 1). The times assigned to the constant time elements were: "Alert" time — 20 seconds; "Dispatch" time — 50 seconds; "Setup" time — 1 minute; "Siren Sounding" time — 3 minutes; "Tuning and Message" time — 3 minutes and 58 seconds. *Ibid.*

<sup>24</sup> *Id.* at 532.

<sup>25</sup> *Ibid.*

<sup>26</sup> *See id.* at 535 (Table 2).

case, including the fact that concerned political jurisdictions can reduce alerting and notification times by making sites available for sirens permanently mounted on poles," the "distribution" of times was "permissible" relative to the "about 15 minutes" standard in Appendix E and the "within 15 minutes" guidance of NUREG-0654, Appendix 3.<sup>27</sup>

On appeal, the MassAG challenges two aspects of the Licensing Board's findings. The first relates to the time required to turn on a radio and locate one of the EBS stations that is broadcasting the informational/instructional message. The MassAG claims that there was no evidence in the record to support the Licensing Board's conclusion that twelve seconds, which were added to the "Tuning and Message" component of the warning process, is an appropriate amount of time for the public to adjust a radio to one of the stations broadcasting emergency messages. Also in this regard, the MassAG contends that, subsequent to the Board's decision, the withdrawal of certain Massachusetts broadcasters from participation agreements acted to make the Board's analyses "not only unfounded but also unlikely" because it now will take longer for the public to locate the radio stations that will be broadcasting the emergency messages.<sup>28</sup>

Second, the MassAG claims that, even if they are correct, the Board's findings on the alert and notification times are not adequate. He asserts that they do not meet the regulatory requirement of completion of initial notification "within about 15 minutes" because at half the sites the times exceed fifteen minutes by twenty percent or more.<sup>29</sup> Further, in an apparent reference to the Licensing Board's specification of certain issues for litigation,<sup>30</sup> the MassAG maintains that the Board improperly relied upon the regulatory guidance in NUREG-0654, Appendix 3, Criterion B.2, to distinguish between alert and notification requirements within five miles of the facility and requirements for the area five to ten miles from the facility, making a "firm time limitation of fifteen minutes" applicable only within a five-mile radius of Seabrook.<sup>31</sup> Moreover, the MassAG declares that, even if so limited, several of the siren activation sites serving the area within five miles of the facility fail to comply with the "15 minutes" criterion.<sup>32</sup> The MassAG concludes that these various deficiencies make it apparent that the Licensing Board's determination was based upon the application of an improper "best efforts" standard.<sup>33</sup>

Applicants view the MassAG's appeal as centering on two findings by the Board: the time required to adjust a radio to one of the EBS stations and the

<sup>27</sup> *Id.* at 534, 537-38.

<sup>28</sup> MassAG Brief at 88-90.

<sup>29</sup> *Id.* at 90-91.

<sup>30</sup> See LBP-89-17, 29 NRC at 522 (Issues A.5-3, -4).

<sup>31</sup> MassAG Brief at 91.

<sup>32</sup> *Id.* at 91-92.

<sup>33</sup> *Id.* at 92.



legal standard adopted by the Board relating to the "15 minutes" standard.<sup>34</sup> As to the first issue, while acknowledging there was no direct testimony on the time required to tune a radio to an EBS station, applicants insist that the time utilized by the Board had to be adequate because it was more conservative (i.e., longer) than that put forth by the MassAG in his proposed findings regarding the total tuning and message capability time.<sup>35</sup> On the second issue, applicants claim the expression "about 15 minutes" that is contained in the regulations is the controlling standard, rather than the "within 15 minutes" language set forth in the NUREG-0654 guidance that the MassAG asserts should be adopted as the requirement for alert and notification timing.<sup>36</sup> Applicants argue that this is an attempt by the MassAG to expand the litigated issues to include alerting time for all of the EPZ, and maintain that the MassAG is foreclosed from this course by his failure to appeal an earlier Licensing Board summary disposition ruling limiting the scope of the alert and notification issue to the first five miles of the EPZ.<sup>37</sup>

## II.

The MassAG's challenges to the Licensing Board decision go to whether it reaches the proper conclusion relative to the time mandated under NRC regulations and guidance for activating the Seabrook warning system. Because the Board's interpretation of what timing elements are relevant to compliance with the regulations and NUREG-0654 guidance has a direct role in any determination about the adequacy of the applicants' warning system, we necessarily must address those findings.

<sup>34</sup> Applicants' Brief (Mar. 5, 1990) at 116. Consistent with our earlier direction that the staff need not duplicate those arguments of applicants with which it agreed, in its brief the staff concurred in the applicants' assertions relative to the MassAG's appeal regarding LBP-89-17. NRC Staff Brief in Response to Intervenor Appeals from LBP-89-32 and LBP-89-17 (Mar. 21, 1990) at 131.

<sup>35</sup> Applicants' Brief at 117-20. Applicants note that the Board apparently made an arithmetic error in arriving at a time of 3:58 (minutes:seconds) for overall tuning and message time, which in fact should have been 3:48. *Id.* at 125. The Board, however, made another addition error with respect to this time component. It determined that there would be a three-second delay between the end of the three-minute siren sounding and the beginning of the next message on the basis that the initial messages, tone alert, and longest announcement would last 3:03. The initial announcement/tone alert and message times are 0:55 and 2:38, for a total of 3:33. The delay thus should be 33 seconds instead of three seconds. The entire "tuning time" of 15 seconds found necessary by the Board, see LBP-89-17, 29 NRC at 533 (although 15 seconds needed to tune radio, only 12 seconds added to "Tuning and Message" time because of three-second delay before beginning of message), and an extra 18 seconds as well, would be available in the 33-second delay between the time the siren stops and the time the next announcement sequence begins. As a consequence, if tuning time were a relevant timing factor, which we find it is not, see *infra* pp. 68-69, 71, there would be no need in these circumstances to include additional "tuning time," as did the Licensing Board.

<sup>36</sup> Applicants' Brief at 126.

<sup>37</sup> *Id.* at 126-27.

A. In providing guidance on compliance with the requirement of section 50.47(b)(5) that an emergency plan include "means to provide early notification" to the population within the EPZ, NUREG-0654 specifies that a proper warning system should consist of two separate components: (1) an "alerting signal" and (2) "notification by commercial broadcast (e.g., EBS)."<sup>38</sup> Both are necessary for a comprehensive warning system in that, as NUREG-0654 makes clear, "[a] system which expects the recipient to turn on a radio receiver without being alerted by an acoustic alerting signal or some other manner is not acceptable."<sup>39</sup> In the case of Seabrook, the VANS is intended to supply the "alerting signal" component, while the radio station broadcast system utilized by applicants furnishes the "broadcast notification" component.<sup>40</sup>

As we have described previously, the Licensing Board's interpretation of the specific timing requirement of Appendix E, § IV.D.3, that a "prompt public notification system shall . . . have the capability to essentially complete the initial notification of the public within the . . . EPZ within about 15 minutes" mandates that both the alert signal and EBS components of the Seabrook warning system be completed within the allotted time frame. This construction, however, fails to acknowledge that the reference to "initial notification" in Appendix E, § IV.D.3 (emphasis supplied), implies that this timing requirement does not necessarily encompass the *totality* of the "notification" process. In fact, the Commission's explanation accompanying the final rule adopting Appendix E makes it apparent that this is indeed the case.

As initially proposed in 1979, the "15 minutes" requirement, which was to be contained in a footnote to Appendix E, evidenced the Commission's expectation "that the capability will be provided to essentially complete *alerting* of the public within the . . . EPZ within 15 minutes . . . ."<sup>41</sup> Thereafter, in the Statement of Consideration for the final rule, the Commission noted this condition had been "removed as a footnote and placed in the body of Appendix E."<sup>42</sup> In addition, in responding to objections that there might never be an accident requiring fifteen-minute notification, that the provision had the potential for significant financial impact, and that its technical basis was questionable, the Commission stated

<sup>38</sup> NUREG-0654, App. 3, at 3-3. Section 50.47(b)(5) also mandates that the warning system provide the means for "clear instruction" to the public. The "broadcast notification" component also fulfills this requirement by supplying messages containing protective action instructions. Further regarding the second component, NUREG-0654 suggests the utilization of "special systems such as [National Oceanic and Atmospheric Administration] radio." NUREG-0654, App. 3, at 3-3. The MassAG has not raised any issue concerning the applicants' utilization of special notification systems.

<sup>39</sup> NUREG-0654, App. 3, at 3-3.

<sup>40</sup> Although VANS sirens do have the capability to function as loudspeakers and provide an informational/instructional message, App. Exh. 11-A at 2-6, applicants have eschewed their use for this purpose, see LBP-89-9, 29 NRC 271, 292 (1989).

<sup>41</sup> 44 Fed. Reg. 75,167, 75,173 n.3 (1979) (to be codified at 10 C.F.R. Part 50, App. E, § IV.D.3 n.3) (proposed Dec. 19, 1979) (emphasis supplied).

<sup>42</sup> 45 Fed. Reg. 55,402, 55,407 (1980).

that the Appendix E directive was being retained as wholly consistent with the rationale behind emergency planning to "provide additional assurance for the public protection even during such an unexpected event."<sup>43</sup> By way of additional explanation, the Commission declared:

*Th[e] wide spectrum of potential accidents also reflects on the appropriate use of the offsite notification capability. The use of this notification capability will range from immediate notification of the public (within 15 minutes) to listen to predesignated radio and television stations, to the more likely events where there is substantial time available for the State and local governmental officials to make a judgment whether or not to activate the public notification system.*

*Any accident involving severe fuel degradation or core melt that results in significant inventories of fission products in the containment would warrant immediate public notification and consideration, based on the particular circumstances, of appropriate protective action because of the potential for leakage of the containment building. In addition, the warning time available for the public to take action may be substantially less than the total time between the original initiating event and the time at which significant radioactive releases take place. Specification of particular times as design objectives for notification of offsite authorities and the public are a means of ensuring that a system will be in place with the capability to notify the public to seek further information by listening to predesignated radio or television stations. The Commission recognizes that not every individual would necessarily be reached by the actual operation of such a system under all conditions of system use. However, the Commission believes that provision of a general alerting system will significantly improve the capability for taking protective actions in the event of an emergency.<sup>44</sup>*

With this explication, Appendix E, § IV.D.3, was adopted in its present form.

From this exposition, it is clear that, consistent with the proposed rule's use of the term "alerting," the term "initial notification" as incorporated in the "about 15 minute" requirement in Appendix E was intended only to encompass completion of the signal that notifies the public that a radiological emergency exists so that they should take appropriate action to seek additional information (e.g., by tuning to a prescribed emergency broadcast station). This corresponds to the first of the two warning system components described above, i.e., the VANS alert sirens. Compliance with the "about 15 minute" requirement therefore should be measured in this instance by adding the three-minute "Siren Sounding" period to the "Alert," "Dispatch," "Setup," and "Route Transit" times. As a consequence, the time involved in tuning into and broadcasting the EBS

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<sup>43</sup> *Ibid.*

<sup>44</sup> *Ibid.* (emphasis supplied).



message is not relevant to a determination of whether this regulatory directive has been fulfilled.<sup>45</sup>

As illustrated in Table B (set forth in the Appendix to this opinion), when the three-minute "Siren Sounding" time is combined with the "Alert," "Dispatch," and "Setup" times of twenty seconds, fifty seconds, and one minute, respectively,<sup>46</sup> and the conservative winter "Route Transit" times set forth in Table A (also in the Appendix),<sup>47</sup> for all of the sixteen siren activation sites within the ten-mile EPZ, the total time falls within the Appendix E requirement that the initial notification be essentially complete "within about 15 minutes."<sup>48</sup>

<sup>45</sup> The MassAG's concern about the effect upon notification timing of the low listenership at the stations utilized for emergency message broadcast thus also is irrelevant. In any event, as we have explained in ALAB-936, 32 NRC at 82-83, the size of the regular audience of those stations is not significant because we have been given no cause to believe that the measures applicants have taken to ensure that the public is aware of which stations provide Seabrook emergency information are inadequate.

<sup>46</sup> See *supra* note 23. Although we utilize the 20-second time for the "Alert" component as set forth by the Licensing Board, we harbor substantial doubt that it is a correct figure. Ten seconds was the time allowed in the system design, Memorandum in Support of Applicants' Motion for Summary Disposition of the [MassAG's] Amended Contention on Notification System (Sept. 17, 1988), Affidavit of Gary J. Catapano at 4 [hereinafter Applicants' Summary Disposition Memorandum], and was the time accepted by the Board as an issue of fact that was not in dispute, LBP-89-9, 29 NRC at 283-84. In adding another 10 seconds, the Board relied upon testimony that was directed not at showing the design objective of the system was incorrect, but rather at what might happen "if" the system failed totally to operate as designed. Given the language of Appendix E, § IV.D.3, and NUREG-0654, indicating that the regulatory focus should be on each warning system's "design objective" rather than its actual effectiveness in operation, see 45 Fed. Reg. at 55407, absent a showing of a likelihood of failure sufficient to call into serious question the validity of applicants' design basis (including implementation time) for this "Alert" segment of the system, the Licensing Board's imposition of the additional time seems questionable. Nonetheless, in light of the minuscule period involved, the Board's action, even if erroneous, does no mischief sufficient to warrant correction.

<sup>47</sup> Although the Licensing Board set forth winter "Route Transit" times in its decision, see LBP-89-17, 29 NRC at 535 (Table 2), we have republished them as part of Table A in the appendix to this opinion in order to correct an additional mathematical error made by the Board. The need for correction arises from the Board's somewhat confusing analysis of the winter times. At one point, the Board declared that the conservative assumption was that winter weather would *reduce* transit times by 25%, *id.* at 534, when in fact in Table 2 the winter transit times have been increased by 25%. Putting this apparently inadvertent error aside, the Board's determination to impose a 25% increase in transit times is consistent with its earlier statement that it accepted the applicants' position that there will be a 25% reduction in the *speed* factor during the winter months. *Id.* at 531. As applicants' witness Edward B. Lieberman explained, a 25% reduction in speed mathematically converts to a 33% increase in transit time. Applicants' Summary Disposition Memorandum, Affidavit of Edward R. Lieberman at 5. Although this transit time effect previously was acknowledged by the Board, see LBP-89-9, 29 NRC at 288 (Finding A.5-1), the factor was not incorporated into the figures the Board utilized in Table 2 in its initial decision, an oversight we remedy.

Also with regard to winter "Route Transit" times, we note that these figures are inherently conservative. It again is not apparent to us, given the emphasis in the regulations and guidance on "design objectives," see *supra* note 46, why the average transit times put forth by applicants, which are based upon times for all four seasons including winter, Applicants' Direct Testimony at 28, are not sufficient for assessing the warning system's compliance with the Appendix E standard (and NUREG-0654 guidance). Indeed, on the basis of those average figures, which also are set forth in Table A, it is even more evident that the "initial notification" completion times for the 16 sites meet the regulatory requirement of "within about 15 minutes."

<sup>48</sup> As a review of Table B makes apparent, only five of the 16 time totals are in excess of 15 minutes and of those only one — that for site 16 — extends more than two minutes beyond a quarter-hour. As site 16's longer time total involves circumstances that, for reasons we detail more fully below, sanction its compliance with the guidance in NUREG-0654, see *infra* note 54, we conclude that it comports as well with the "about 15 minutes" requirement of Appendix E.

B. As applicants point out, because Appendix E is the only regulatory timing requirement for warning systems, it — not the NUREG-0654 guidance — is the standard with which applicants' warning system must comply.<sup>49</sup> Accordingly, the MassAG's assertion that the system cannot comply with the arguably more stringent "within 15 minutes" guidance of NUREG-0654 is of questionable significance.<sup>50</sup> Nonetheless, after reviewing this matter as well, we conclude that contrary to the MassAG's insistence, the applicants' warning system also meets the NUREG-0654 guidelines.

As previously noted, while NUREG-0654 indicates that a warning system should include the "[c]apability for providing both an alert signal and an informational or instructional message . . . within 15 minutes," the regulatory requirement of Appendix E is that the system have "the *capability to essentially complete the initial notification* of the public . . . within about 15 minutes." (Emphases supplied.) Although the Licensing Board apparently found no significance in the difference in the highlighted language of these two provisions, we conclude that this is an important distinction that must be taken into account in judging compliance with the NUREG-0654 guidance.

As we have previously noted, the Licensing Board explicitly rejected FEMA's additional guidance construing the language of NUREG-0654 as signifying only that the alert signal must be activated and the EBS message must be on the air; instead, the Board mandated that both the signal and the message be completed. We find, however, that the difference in terminology between the requirement of Appendix E, §IV.D.3, for the capacity "to essentially complete" the initial notification, and the guidance in NUREG-0654 that there be the "capability for providing," i.e., furnishing, the alert signal and the informational/instructional message to the public, supports the FEMA interpretation. In specifying that there need only be the "capacity for providing" the alert signal and message, as opposed to being "completed," we perceive the intent on the part of the drafters of NUREG-0654 to suggest that applicants need go beyond the activation of the sirens and the EBS broadcast in order to comply with its "within 15 minutes" guideline.

Certainly, this interpretation makes good sense. As applicants suggested before the Licensing Board,<sup>51</sup> the Board's interpretation requiring that both the

<sup>49</sup> See, e.g., *Long Island Lighting Co.* (Shoreham Nuclear Power Station, Unit 1), ALAB-900, 28 NRC 275, 290, review declined, CLI-88-11, 28 NRC 603 (1988).

<sup>50</sup> NUREG-0654 appears to be more stringent than Appendix E, §IV.D.3, because it does not contain the qualifier "about" found in section IV.D.3. That the NUREG-0654 guidance should be somewhat more demanding is not untoward as it acts to assure compliance with the regulatory requirement. In this instance, if applicants' siren signal (and EBS message) is *initiated* "within 15 minutes," which we find below is all that NUREG-0654 suggests, it seems unlikely that the limited period of time until that signal is concluded (i.e., three to five minutes, see *infra* note 52) could fail to conform with the Appendix E requirement that the signal be "essentially complete . . . within about 15 minutes."

<sup>51</sup> See LHP-89-17, 29 NRC at 533.



siren and the EBS message be presented completely and sequentially penalizes the use of lengthy, albeit possibly more instructive, messages. As a result, the Board's interpretation could have the deleterious effect of dissuading an applicant whose warning system may have extended activation times from proposing more prolonged messages, even if longer messages would otherwise better serve the public interest.<sup>52</sup> We thus find appropriate the FEMA guidance requiring only that siren signal and EBS message activation begin "within 15 minutes" in order to comply with NUREG-0654 guidance. And, as with the Appendix E requirement, the time involved in tuning into and broadcasting the EBS messages is not relevant in assessing the warning system's adequacy.

Because the activation of the siren and the EBS occurs essentially simultaneously in this instance,<sup>53</sup> in order to determine compliance with the NUREG-0654 guidance figure of "within 15 minutes" it is necessary to include fifty-five seconds after the "Setup" to account for siren activation and the start of the EBS informational/instructional message after the initial announcements and the tone alert signal. As is also illustrated in Table B (attached as part of the Appendix to this decision), when this fifty-five second time period is combined with the "Alert," "Dispatch," "Setup," and corrected winter "Route Transit" times, the total time for the sixteen siren activation sites within the ten-mile EPZ conforms with the NUREG-0654 guidance that a signal and a message be "provided . . .

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<sup>52</sup> The same thing would be true for the "Siren Sounding" time, which the guidance indicates should be from three to five minutes long. NUREG-0654, App. 3, at 3-12. To conform to the Licensing Board's reading of the NUREG-0654 guidance, an applicant faced with a warning system timing problem no doubt would choose three minutes as its siren sounding time even if, in the circumstances, something in excess of that time period might be better.

<sup>53</sup> The testimony before the Board indicates that, when State officials have given permission for warning system activation, applicants' emergency response coordinator will inform the EBS stations that they should begin broadcasting a message at a specified time. The coordinator then listens to the stations and, when the EBS broadcast begins, he or she immediately sends out the signal that promptly activates the VANS sirens. Applicants' Direct Testimony at 30; see Tr. 135-38.

In a fast-breaking accident, there is the possibility that the siren activation signal could be given before all the VANS trucks are at their activation sites. In that circumstance, the activation signal is stored electronically and, when the truck reaches its destination and boom deployment takes the siren to a height of 25 feet, the siren will begin sounding. Tr. 87-88. Applicants, however, have designed the system so that the first VANS trucks to leave each staging area are those sent to the most distant activation sites served by that staging area. Applicants' Direct Testimony at 23, a measure the Licensing Board found (and we agree) is adequate to avoid or minimize any potential for delay, see LBP-89-17, 29 NRC at 531.



within 15 minutes.<sup>54</sup> Thus, the MassAG's challenge to the applicants' emergency warning system under NUREG-0654 likewise is without basis.<sup>55</sup>

For the reasons set forth herein, the Licensing Board's determination in LBP-89-17, 29 NRC 519 (1989), that the applicants' emergency warning system for the Massachusetts portion of the Seabrook EPZ is in compliance with applicable regulatory requirements and NUREG-0654 guidance is *affirmed*.

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<sup>54</sup> As Table B indicates, the only activation site that even arguably falls outside the NUREG-0654 guidance is site 16, with a total time of 18:40. Because, in conformity with emergency planning requirements, *see Long Island Lighting Co. (Shoreham Nuclear Power Station, Unit 1), CLI-87-12, 26 NRC 383, 395 (1987)*, the Seabrook EPZ boundaries were drawn to conform generally to political jurisdictions rather than strictly at a radius of 10 miles from the facility, this activation site is located between 10 and 11 miles from the facility. Applicants' Exh. 11-B at 2-9. In complying with the exhortation in FEMA Guidance Memorandum AN-1 that a warning system design submittal "should contain the rationale" for instances in which alert and notification will be provided beyond 15 minutes, FEMA Guidance Memorandum AN-1, Attach. 1, at 1-3, applicants' design report states that the geographical area covered uniquely by the siren at site 16 "has a maximum population of 401 located within an area of approximately 3 square miles." Applicants' Exh. 11-B at 2-9. This siren thus appears to cover the type of low population zone for which NUREG-0654 guidance permits alert and notification to occur within 45 minutes, *see infra* note 55, and accordingly is in compliance with the NUREG guidelines.

<sup>55</sup> We also find without substance the MassAG's additional argument that the Licensing Board, by applying different timing standards depending on the distance from the facility, engaged in error requiring reversal. Our conclusion in this regard also arises from our evaluation of the NUREG-0654 criteria.

The Commission previously has indicated that, as the guidance embodied in NUREG-0654, Appendix 3, Criteria B.2.b. and c., reflects, while a warning system should "assure direct coverage of essentially 100% of the population within 5 miles of the site," there is some flexibility in terms of the percentage of population coverage that must be obtained by the warning system at a distance of more than five miles from the facility. Specifically, the Commission has declared that "[t]he lack of a specified percentage from 5 to 10 miles is to allow planners the flexibility to design the most cost-effective system to meet [the general objective of providing an alert signal and an informational/instructional message in the 10-mile EPZ within 15 minutes]." *Final Rule on Emergency Planning*, CLI-80-40, 12 NRC 636, 638 (1980). This theme is reiterated in NUREG-0654, which declares that "[t]he lack of a specific design objective for a specified percent of the population between 5 and 10 miles which must receive the prompt signal within 15 minutes is to allow flexibility in system design." NUREG-0654, App. 3, at 3-4. Also recognizing this differentiation "based on geographic location within the emergency planning zone," FEMA's Guidance Memorandum AN-1, in addressing qualification of alert and notification systems under NUREG-0654, provides that "[a]lert and notification systems must also be capable of providing an alert signal and an instructional message within 15 minutes between 5 and 10 miles of the facility. However, in extremely rural, low population areas beyond 5 miles, up to 45 minutes may be allowed for providing an alert signal and an instructional message to the permanent and transient population." FEMA Guidance Memorandum AN-1, Attach. 1, at 1-2 to -3.

As these various sources make apparent, the geographic distinction embodied in NUREG-0654, Appendix 3, Criteria B.2.b and c., affords some latitude in providing notification to the remote areas in the portion of the EPZ that is 5 to 10 (or more) miles away from the facility. It does not, however, sanction a warning system whose design fails to provide an alert signal and an informational/instructional message to more populated areas throughout the entire EPZ, including the 5 to 10 mile portion, within 15 minutes. To the extent the Licensing Board's decision suggests the contrary, it is incorrect. Nonetheless, any misapprehension the Board may have harbored in this regard has no practical significance here because, as we have explained above, the record before us does not supply a basis for concluding that the alert signal and broadcast message supplied by the applicants' warning system throughout the EPZ fails to comply with the timing and coverage guidelines set forth in NUREG-0654, Appendix 3.

It is so ORDERED.

FOR THE APPEAL BOARD

Barbara A. Tompkins  
Secretary to the  
Appeal Board

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APPENDIX

TABLE A

Transit Times<sup>56</sup>

Location:	Average Transit Time (Min:sec) <sup>57</sup>	Winter Transit Time (Min:sec)
1	8:37	11:28
2	5:03	6:43
3	6:29	8:37
4	0:00	0:00
5	0:00	0:00
6	3:09	4:11
7	3:42	4:55
8	7:13	9:36
9	7:17	9:41
10	7:18	9:43
11	7:32	10:01
12	8:25	11:11
13	8:03	10:42
14	0:55	1:13
15	3:01	4:01
16	11:43	15:35

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<sup>56</sup> Applicants' Direct Testimony at 28.

<sup>57</sup> Average Transit Time is based on measured times for all four seasons. *Ibid.*

**TABLE B**  
**Total Times Relative to Compliance**  
**with 10 C.F.R. Part 50, App. E, § IV.D.3**  
**and NUREG-0654, App. 3**

Location	Time Under App. E (Min:sec) <sup>58</sup>	Time Under NUREG-0654 (Min:sec) <sup>59</sup>
1	16:38	14:33
2	11:53	9:48
3	13:47	11:42
4	5:10	3:05
5	5:10	3:05
6	9:21	7:16
7	10:05	8:00
8	14:46	12:41
9	14:51	12:46
10	14:53	12:48
11	15:11	13:06
12	16:21	14:16
13	15:52	13:47
14	6:23	4:18
15	9:11	7:06
16	20:45	18:40

<sup>58</sup> Computed for each site by adding "Alert" time (0:20), "Dispatch" time (0:50), "Setup" time (1:00), "Winter Transit" time (see Table A), and "Siren Sounding" time (3:00). See *supra* p. 69.

<sup>59</sup> Computed for each site by adding "Alert" time (0:20), "Dispatch" time (0:50), "Setup" time (1:00), "Winter Transit" time (see Table A), and time for initial announcements and tone alert signal (0:55). See *supra* pp. 71-72.



UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

ATOMIC SAFETY AND LICENSING APPEAL BOARD

Administrative Judges:

G. Paul Bollwerk, III, Chairman  
Alan S. Rosenthal  
Howard A. Wilber

In the Matter of

Docket Nos. 50-443-OL  
50-444-OL  
(Offsite Emergency  
Planning Issues)

PUBLIC SERVICE COMPANY OF  
NEW HAMPSHIRE, *et al.*  
(Seabrook Station, Units 1  
and 2)

August 20, 1990

The Appeal Board affirms the Licensing Board's decision in LBP-90-1, 31 NRC 19 (1990), denying intervenors' motion to reopen the record and admit a new contention relative to the adequacy of the emergency broadcast system for the Seabrook facility.

**RULES OF PRACTICE: REOPENING OF RECORD**

Each of the three criteria set forth in 10 C.F.R. § 2.734(a) for reopening of the record must be met before a reopening motion is granted.

**RULES OF PRACTICE: REOPENING OF RECORD**

If a reopening motion raises a contention not previously in controversy, it must also satisfy the requirements for the admission of untimely contentions set forth in 10 C.F.R. § 2.714(a)(1)(i)-(v). 10 C.F.R. § 2.734(d).

**EMERGENCY PLANNING: PUBLIC NOTIFICATION**

**EMERGENCY PLAN(S): CONTENT (NOTIFICATION; PUBLIC INFORMATION)**

The Commission's regulations require that emergency response plans "provide early notification and clear instruction to the populace within the plume exposure pathway Emergency Planning Zone." 10 C.F.R. § 50.47(b)(5).

**EMERGENCY PLANNING: PUBLIC NOTIFICATION**

**EMERGENCY PLAN(S): CONTENT (NOTIFICATION; PUBLIC INFORMATION); NOTIFICATION REQUIREMENTS**

Applicants for a full-power license are expected to "establish a system for disseminating to the public appropriate information . . . including the appropriate notification to appropriate broadcast media, e.g., the Emergency Broadcast System (EBS)." NUREG-0654/FEMA-REP-1 (Rev. 1), "Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants" (Nov. 1980), Criterion II.E.5.

**EMERGENCY PLANNING: PUBLIC NOTIFICATION**

**EMERGENCY PLAN(S): CONTENT (NOTIFICATION; PUBLIC INFORMATION); NOTIFICATION REQUIREMENTS**

Resort to an EBS is one recognized method of providing appropriate notification. An EBS customarily is a network of radio and television stations voluntarily organized, in accordance with and subject to the regulations of the Federal Communications Commission, to broadcast emergency messages to the public in the event of an emergency. *See* 47 C.F.R. §§ 73.901-.962.

**APPEALS BOARD(S): ADVISORY OPINIONS**

The fact that a decision is issued as an advisory opinion does not necessarily preclude reliance on its reasoning.



#### **EMERGENCY PLANNING: PUBLIC NOTIFICATION**

##### **EMERGENCY PLAN(S): CONTENT (NOTIFICATION; PUBLIC INFORMATION); NOTIFICATION REQUIREMENTS**

It may be assumed that *in the absence of compelling contrary evidence*, no participant in a state-established EBS network will refuse to discharge its communication function in a timely manner upon the occurrence of a genuine emergency requiring public notification. See *Long Island Lighting Co.* (Shoreham Nuclear Power Station, Unit 1), ALAB-911, 29 NRC 247, 254-55 (1989).

#### **EMERGENCY PLANNING: STATE AND LOCAL GOVERNMENT (PARTICIPATION)**

##### **EMERGENCY PLAN(S): STATE AND LOCAL GOVERNMENT PLANS (EFFECT OF ABSENCE); UTILITY PLAN AS SUBSTITUTE**

For the situation in which there is a nonparticipating state or local government, the Commission has established a "best efforts presumption." Specifically, it assumes that there will be "some 'best effort' State and County response in the event of an accident . . . that . . . would utilize [the utility's] plan as the best source for emergency planning information and options." *Shoreham*, CLI-86-13, 24 NRC 22, 31 (1986). See also 10 C.F.R. § 50.47(c)(1)(iii); *Massachusetts v. United States*, 856 F.2d 378 (1st Cir. 1988).

#### **RULES OF PRACTICE: REOPENING OF RECORD**

The sponsors of a reopening motion have the burden of demonstrating that the criteria for the grant of the requested relief have been satisfied. See *Cleveland Electric Illuminating Co.* (Perry Nuclear Power Plant, Units 1 and 2), CLI-86-7, 23 NRC 233, 235 (1986), *aff'd sub nom. Ohio v. NRC*, 814 F.2d 258 (6th Cir. 1987); *Louisiana Power & Light Co.* (Waterford Steam Electric Station, Unit 3), CLI-86-1, 23 NRC 1, 5, *aff'd sub nom. Oystershell Alliance v. NRC*, 800 F.2d 1201 (D.C. Cir. 1986).

#### **RULES OF PRACTICE: REOPENING OF RECORD**

If a Board finds that a reopening motion does not address a significant safety or environmental issue, it need not decide whether the motion was timely. See 10 C.F.R. § 2.734(a).



## ADJUDICATORY BOARDS: BIAS

A party's claim of bias may not rest merely upon disenchantment with prior Board rulings. See, e.g., *Northern Indiana Public Service Co.* (Bailly Generating Station, Nuclear-1), ALAB-224, 8 AEC 244, 246-48 (1974). See also *Seabrook*, ALAB-748, 18 NRC 1184 (1983); ALAB-749, 18 NRC 1195 (1983); ALAB-751, 18 NRC 1313 (1983).

## APPEARANCES

**Leslie B. Greer**, Boston, Massachusetts, **Robert A. Backus**, Manchester, New Hampshire, and **Diane Curran**, Washington, D.C., for the intervenors, Attorney General of Massachusetts, Seacoast Anti-Pollution League, and New England Coalition on Nuclear Pollution.

**Thomas G. Dignan, Jr.**, **George H. Lewald**, **Jeffrey P. Trout**, and **Jay Bradford Smith**, Boston, Massachusetts, for the applicants, Public Service Company of New Hampshire, *et al.*

**Lisa B. Clark** for the Nuclear Regulatory Commission staff.

## DECISION

Before us in this operating license proceeding involving the Seabrook nuclear power facility is a joint appeal by intervenors Massachusetts Attorney General, Seacoast Anti-Pollution League, and New England Coalition on Nuclear Pollution from LBP-90-1.<sup>1</sup> In that decision, the Licensing Board denied the intervenors' November 9, 1989 motion (as supplemented on November 22) to reopen the record to admit a new contention addressed to the adequacy of one aspect of the facility's emergency response planning.

Under the Commission's Rules of Practice, a motion to reopen a closed record to consider additional evidence may not be granted unless, among other things, it satisfies *each* of the following criteria:

- (1) The motion must be timely, except that an exceptionally grave issue may be considered in the discretion of the presiding officer even if untimely presented.
- (2) The motion must address a significant safety or environmental issue.

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<sup>1</sup> 31 NRC 19 (1990).

(3) The motion must demonstrate that a materially different result would be or would have been likely had the newly proffered evidence been considered initially.<sup>2</sup>

In this instance, the Licensing Board rested its denial of the motion on its finding that none of these criteria had been met. Being persuaded that, at the very least, the intervenors failed to establish the safety significance of the new issue they seek to present, we affirm the denial.

A.1. The controversy at bar is rooted in the Commission's regulations requiring emergency response plans for nuclear power reactors to "provide early notification and clear instruction to the populace within the plume exposure pathway Emergency Planning Zone [(EPZ)]."<sup>3</sup> Accordingly, applicants for a full-power license are expected to "establish a system for disseminating to the public appropriate information . . . including the appropriate notification to appropriate broadcast media, e.g., the Emergency Broadcast System (EBS)."<sup>4</sup> With respect to the time in which such notification should occur, the governing regulation states that "[t]he design objective of [this] system shall be to have the capability to essentially complete the initial notification of the public within the . . . EPZ within about 15 minutes."<sup>5</sup>

As thus seen, resort to an EBS is one recognized method of providing appropriate public notification. Customarily, an EBS is a network of radio and television stations voluntarily organized, in accordance with and subject to the regulations of the Federal Communications Commission, to broadcast emergency messages to the public in the event of an emergency.<sup>6</sup> The Commonwealth of

<sup>2</sup> 10 C.F.R. § 2.734(a). Subsection (d) provides that, if (as here) it "relates to a contention not previously in controversy among the parties," the motion must also satisfy the requirements for the admission of untimely contentions set forth in 10 C.F.R. § 2.714(a)(1)(i)-(v).

<sup>3</sup> 10 C.F.R. § 50.47(b)(5). See also 10 C.F.R. Part 50, App. E., § IV.D. The Commission and the Federal Emergency Management Agency (FEMA) jointly issued guidance for fulfilling the Commission's emergency planning requirements. See NUREG-0654/FEMA-REP-1 (Rev. 1), "Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants" (Nov. 1980) [hereinafter NUREG-0654]. NRC and FEMA also developed a supplement to NUREG-0654 covering those situations in which state and/or local governments do not participate in emergency planning. NUREG-0654/FEMA-REP-1 (Rev. 1, Supp. 1), "Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants: Criteria for Utility Offsite Planning and Preparedness (Final Report)" (Sept. 1988) [hereinafter NUREG-0654, Supp. 1]. Both NUREG-0654 and its supplement carry over the terms concerning notification to the public that are found in 10 C.F.R. § 50.47(b)(5). See NUREG-0654, Criterion I.E. at 43; NUREG-0654, Supp. 1, Criterion I.E. at 11.

<sup>4</sup> NUREG-0654, Supp. 1, Criterion I.E.3. Because the Commonwealth of Massachusetts is not participating in emergency planning, we refer to the supplement to NUREG-0654, rather than to the original document, where appropriate. See, e.g., LBP-89-32, 30 NRC 375, 381 (1989), *appeals pending*.

<sup>5</sup> 10 C.F.R. Part 50, App. E., § IV.D.3. See also NUREG-0654, which states that the "minimum acceptable design objectives for coverage by the system [include the capability for providing both an alert signal and an informational or instructional message to the population on an area wide basis throughout the 10 mile EPZ, within 15 minutes." NUREG-0654, App. 3, at 3-3.

<sup>6</sup> See 47 C.F.R. §§ 73.901-962.



Massachusetts has such a network in place.<sup>7</sup> In the event of a radiological emergency at Seabrook, it can be activated through direct communication from the Governor of Massachusetts, the Massachusetts Civil Defense Agency, or other designated state officials to the "originating primary relay" station, WROR-FM in Boston. That station would be responsible for passing the messages on to the various area Common Program Control (CPC) stations, each of which, in turn, would undertake to disseminate the messages to all participating radio stations within its area. Alternatively, the official(s) activating the EBS might communicate directly with WCGY, the particular CPC station (located in Lawrence, Massachusetts) to which the local radio stations providing broadcast signal coverage in the Massachusetts portion of the EPZ are tuned.<sup>8</sup>

Quite apart from the general obligations it assumed when it became a participant in the Massachusetts statewide EBS, WCGY entered into an independent agreement with the applicants. That agreement was reflected in a September 14, 1987 letter signed by an official of the lead applicant and the WCGY station manager. In essence, WCGY assumed the responsibility of activating the state EBS for the Massachusetts portion of the Seabrook EPZ, should it be requested to do so by the applicants' Offsite Response Director assigned to carry out the Seabrook Plan for Massachusetts Communities (SPMC) — the emergency response plan devised by the applicants in the absence of a Commonwealth-sponsored plan.<sup>9</sup>

Prior to this agreement with WCGY, the applicants entered into a separate compact with two "sister stations": WLYT-FM and WHAV-AM, located in Haverhill, Massachusetts. In an August 12, 1987 letter to an official of the lead applicant, those stations committed themselves "to provide emergency information to the general public in the event of an emergency condition at the Seabrook Station." To this end, the stations proposed to develop an "emergency communication link [with the applicants' emergency response organization] so that in the event of any emergency [the stations] can confirm [the] accuracy of information and minimize the time necessary to alert the public to the circumstances at issue."<sup>10</sup>

<sup>7</sup> See *Intervenors' Motion to Admit a Late Filed Contention and Reopen the Record on the SPMC Based Upon the Withdrawal of the Massachusetts E.B.S. Network and WCGY* (Nov. 9, 1989), Attach. D, Exh. 1, at 2, 4-5, App. 1, at 1-2 (Massachusetts [EBS] Operational Plan (Rev. May 1988)) [hereinafter *Intervenors' Reopening Motion*].

<sup>8</sup> See *id.*, Attach. D (Affidavit of Robert Boulay Regarding Voiding of the EBS Letters of Agreement (Nov. 9, 1989)); *id.*, Attach. D, Exh. 1, at 2-4, 6, App. 1, at 1-1, -6 (Massachusetts [EBS] Operational Plan).

<sup>9</sup> See *id.*, Attach. F, Exh. A (Sept. 14, 1987 Letter of Agreement between Radio Station WCGY and New Hampshire Yankee's Offsite Response Organization). This document is also an attachment to Exhibit III of Applicants' Answer to Intervenors' Motion to Admit a Late-Filed Contention and Reopen the Record Based upon the Withdrawal of the Massachusetts E.B.S. Network and WCGY (Nov. 15, 1989) [hereinafter Applicants' Answer]. In addition, the Letter of Agreement is found in Appendix C of the Seabrook Plan for Massachusetts Communities (Rev. 0, Amend. 6) at C-66 to -67. The SPMC was admitted as Applicants' Exhibit 42.

<sup>10</sup> Applicants' Answer, Exh. I, Attach. B (Aug. 12, 1987 Letter from William A. Gould to Edward A. Brown). This letter is also found in Appendix C of the SPMC. See SPMC at C-64 to -65.



2. The development that triggered the reopening motion at bar was an October 20, 1989 letter from the WCGY station manager to an official of the lead applicant, repudiating the September 14, 1987 Letter of Agreement on the ground that the applicants had failed to supply certain equipment that allegedly had been promised.<sup>11</sup> According to the motion, without the cooperation of WCGY, the applicants could not activate satisfactorily the Massachusetts EBS, with the further consequence that they would be unable to provide adequate public notification of an emergency.

As noted above, the Licensing Board denied the motion on the ground that it met none of the specified reopening criteria. On the matter of lack of safety significance, the Board relied in part upon our *Shoreham* opinion of last year,<sup>12</sup> which the Licensing Board took to stand for the proposition that the existence of a state EBS is, in and of itself, enough to presume adequate coverage for notification purposes, regardless of the presence or absence of a formal agreement.<sup>13</sup> In this connection, the Board pointed to the intervenors' acknowledgment that, even without the agreement between WCGY and applicants, a direct communication from the Governor of Massachusetts or his or her delegate to either that station or WROR could activate the system.<sup>14</sup>

B. Nothing presented to us by the intervenors suggests that the Licensing Board erred in concluding that the reopening motion fails to raise a significant safety issue. The nub of their appellate position is that, as a result of WCGY's repudiation of the Letter of Agreement, the state EBS will be unable to fulfill the regulatory design objective of completing the initial notification of the public in the EPZ "within about 15 minutes."<sup>15</sup> For a variety of reasons, that assertion falls wide of the mark.

To begin with, the fact that WCGY no longer has a separate agreement with the applicants does not perforce mean that it will not carry out its assigned EBS role should it be called upon to do so in the event of a radiological emergency at Seabrook. On this score, we adhere to our view in *Shoreham*: in a nutshell, we are prepared to assume, *in the absence (as here) of compelling contrary evidence*, that no participant in a state-established EBS network will refuse to discharge its communication function in a timely manner upon the occurrence of a genuine emergency requiring public notification --- whether that emergency

<sup>11</sup> See Intervenors' Reopening Motion, Attach. F., Eah. C (Oct. 20, 1989 Letter from John F. Bassett to B. Boyd, Jr.). This letter is also attached to Exhibit III of Applicants' Answer. Although of no present significance, the applicants dispute the accuracy of the allegation concerning the equipment. See Applicants' Answer at 8.

<sup>12</sup> *Long Island Lighting Co.* (Shoreham Nuclear Power Station, Unit 1), ALAB-911, 29 NRC 247 (1989). The fact that ALAB-911 was issued as an advisory opinion did not preclude the Licensing Board's reliance on its reasoning to the extent here applicable.

<sup>13</sup> See LBP-90-1, 31 NRC at 27-29.

<sup>14</sup> See *id.* at 29 & n.40.

<sup>15</sup> See *supra* p. 79.

arises at a nuclear power facility or elsewhere.<sup>16</sup> Stated otherwise, we see a crucial difference between, on the one hand, WCGY's change of heart respecting its willingness to assume special functions at the applicants' behest and, on the other hand, that station's refusal to perform in time of emergency a role that it accepted when it became a part of the overall state EBS network. In that connection, such a refusal would fly in the teeth of the directive of either the Governor or the other state official who would activate the network in his or her stead.<sup>17</sup>

In these circumstances, as part of their endeavor to meet the reopening criteria, it was the intervenors' obligation to establish that the fifteen-minute design objective could not be met if WCGY received the public notification message from WROR or a state official (as called for by the state EBS plan), rather than directly from the applicants' Offsite Response Director (as contemplated by the now-vitiated letter of agreement).<sup>18</sup> This obligation clearly was not met. Even had it been, however, the intervenors' position would not be improved.

There is no claim that stations WLYT and WHAV, with which the applicants continue to have an agreement, are incapable of providing radio broadcast coverage throughout the Massachusetts portion of the EPZ. Moreover, in the context of their reopening motion, the intervenors at least implicitly concede that those stations could supply the messages in conformity with the fifteen-minute design objective.<sup>19</sup> To be sure, as intervenors stress, the stations do not ordinarily enjoy a large audience. It is not important, however, how extensive their established listenership might be. Rather, of crucial significance

<sup>16</sup> See ALAB-911, 29 NRC at 254-55.

<sup>17</sup> For the situation in which there is a nonparticipating state or local government, the Commission has established a "best efforts presumption." Specifically, it assumes that there will be "some 'best effort' State and County response in the event of an accident . . . that . . . would utilize [the utility's] plan as the best source for emergency planning information and options." *Shoreham*, CLI-86-13, 24 NRC 22, 31 (1986). See also 10 C.F.R. § 50.47(c)(1)(iii), which states that "the NRC will recognize the reality that in an actual emergency, state and local government officials will exercise their best efforts to protect the health and safety of the public." (This regulation was explicitly upheld in *Massachusetts v. United States*, 856 F.2d 378 (1st Cir. 1988)). Given this presumption, we cannot doubt that such a directive would be forthcoming from the Commonwealth in the event of an emergency.

For reasons akin to those applicable to WCGY, we are similarly confident that the directive of a state official would be honored by the entire state EBS. This is so notwithstanding the attempt by the EBS Co-Chairman to repudiate a special agreement that the EBS had entered into with the applicants allowing them to seek EBS activation in the event of a Seabrook emergency. See Intervenors' Reopening Motion, Attach. F, Exh. B (Oct. 13, 1989 Letter from Douglas J. Rowe to R. Boyd, Jr.).

<sup>18</sup> The sponsors of a reopening motion have the burden of demonstrating that the criteria for the grant of the requested relief have been satisfied. See *Cleveland Electric Illuminating Co. (Perry Nuclear Power Plant, Units 1 and 2)*, CLI-86-7, 23 NRC 233, 235 (1986), *aff'd sub nom. Ohio v. NRC*, 814 F.2d 258 (6th Cir. 1987); *Louisiana Power & Light Co. (Waterford Steam Electric Station, Unit 3)*, CLI-86-1, 23 NRC 1, 5, *aff'd sub nom. Oystershell Alliance v. NRC*, 800 F.2d 1201 (D.C. Cir. 1986).

<sup>19</sup> See Intervenors' Brief in Support of Their Appeal of LBP-90-1 (Feb. 16, 1990) at 31 [hereinafter Intervenors' Brief]. The question of timeliness of the applicants' emergency notification system for the Massachusetts portion of the EPZ is one we deal with directly in ALAB-935, 32 NRC 57, issued this date.



is whether measures have been taken to prompt persons within the EPZ to tune in those stations when alerted to the emergency (by sirens or otherwise). To this end, the SPMC requires that information on emergency procedures, including which stations will carry emergency information, be provided to the public from sources such as calendars, fliers, and pamphlets.<sup>20</sup> This information is to be updated to keep the public abreast of relevant changes in emergency procedures.<sup>21</sup> We have been given no cause to conclude that these requirements either will not be met or will not serve their intended purpose.<sup>22</sup>

The short of the matter therefore is that the intervenors have simply failed in their reopening request to demonstrate that the repudiation of the WCGY letter of agreement puts the accomplishment of the regulatory objective of prompt public notification in substantial peril.<sup>23</sup> That being so, the reopening motion was correctly denied.<sup>24</sup>

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LBP-90-1, 31 NRC 19 (1990), is *affirmed*.  
It is so ORDERED.

FOR THE APPEAL BOARD

Barbara A. Tompkins  
Secretary to the  
Appeal Board

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<sup>20</sup> SPMC at 3.7-1 to -4.

<sup>21</sup> See SPMC § 7.5.

<sup>22</sup> In this regard, at oral argument applicants' counsel assured us that the existing informational materials were updated to reflect the withdrawal of WCGY from the role it assumed under its special agreement. App. Tr. 151-52.

<sup>23</sup> This conclusion is mandated whether or not the fifteen-minute design objective imposes a rigid requirement, a question we address in ALAB-935.

<sup>24</sup> Given our conclusion on the lack of safety significance, manifestly the third reopening criterion (*see supra* p. 79) is not satisfied. We need not and do not decide whether the motion to reopen was timely.

We can dispose summarily of intervenors' complaint (Intervenors' Brief at 6) that due process required that the Licensing Board address the EBS issue raised by their reopening motion before rendition of the Board's decision in LBP-89-32, 30 NRC 375, authorizing the issuance of a full-power operating license. Whether or not such a due process right exists, our decision that the motion failed to satisfy the Commission's reopening criteria makes the asserted error on the Licensing Board's part harmless at most.

For its part, intervenors' related allegations of Licensing Board bias ignore the settled principle that claims of that nature may not rest (as apparently does the claim here) merely upon disenchantment with prior Board rulings. See, e.g., *Northern Indiana Public Service Co.* (Bailly Generating Station, Nuclear-1), ALAB-224, 8 AEC 244, 246-48 (1974). See also, in the present proceeding, ALAB-748, 18 NRC 1184 (1983); ALAB-749, 18 NRC 1195 (1983); ALAB-751, 18 NRC 1313 (1983).



# Atomic Safety and Licensing Boards Issuances

## ATOMIC SAFETY AND LICENSING BOARD PANEL

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\*Permanent panel members

LICENSING BOARDS

UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

ATOMIC SAFETY AND LICENSING BOARD

Before Administrative Judges:

Charles Bechhoefer, Chairman  
Dr. Jerry R. Kline  
Gustave A. Linenberger, Jr.

In the Matters of

ROBERT L. DICKHERBER

Docket No. 55-5043-SC  
(ASLBP No. 90-610-01-SC)  
(EA 90-031)  
(Senior Operator License  
Limited to Fuel Handling,  
No. SOP-2365-8)

COMMONWEALTH EDISON COMPANY  
(Quad Cities Nuclear Power  
Station)

Docket Nos. 50-254-OM  
50-265-OM  
(ASLBP No. 90-609-02-OM)  
(EA 90-032)  
(Facility Operating License  
Nos. DPR-29, DPR-30)

August 1, 1990

The Licensing Board approves a Settlement Agreement between the parties and terminates two enforcement proceedings.



## **RULES OF PRACTICE: SETTLEMENT OF CONTESTED PROCEEDINGS**

Where a Notice of Hearing has been issued, a Licensing Board is authorized to approve termination of an enforcement proceeding on the basis of a settlement agreement, "according due weight to the position of the staff." 10 C.F.R. § 2.203.

### **MEMORANDUM AND ORDER**

**(Approving Settlement Agreement and Terminating Proceedings)**

These proceedings involve two enforcement orders issued by the NRC Staff, both emanating from an incident occurring on October 17, 1989, during refueling operations at the Quad Cities Nuclear Power Plant, involving Mr. Robert L. Dickherber, holder of a Senior Operator License Limited to Fuel Handling. Mr. Dickherber allegedly directed a refueling crew to perform an unauthorized fuel manipulation to correct a fuel load error. Moreover, control room personnel allegedly were not notified of the fuel manipulation, as required by governing procedures. As a result, the NRC Staff issued the two enforcement orders: (1) an order suspending Mr. Dickherber's license and ordering him to show cause why his license should not be revoked; and (2) an order to modify the Quad Cities Nuclear Plant facility license to prohibit Mr. Dickherber from participating in "any licensed activity." 55 Fed. Reg. 7798, 7797 (Mar. 5, 1990).

Because we found Mr. Dickherber to be adversely affected by both orders, we admitted him to both proceedings by our Memorandum and Order dated May 4, 1990 (unpublished). On May 4, 1990, we also issued a Notice of Hearing for both proceedings. 55 Fed. Reg. 19,684-85 (May 10, 1990).

On April 13, 1990, Mr. Dickherber filed an answer to both enforcement orders. In the aforementioned May 4, 1990 Memorandum and Order, we provided that the NRC Staff should respond to Mr. Dickherber's answer by June 1, 1990. We also invited Commonwealth Edison Company to file a response. By Memorandum and Order dated May 9, 1990, and thereafter by Memorandum and Order dated July 2, 1990, we granted joint motions of all parties to defer the filing dates for answers to July 9, 1990, and July 30, 1990, respectively. The deferrals were to permit settlement negotiations between the parties and, in addition, would permit responses to a supplemental answer filed by Mr. Dickherber on June 1, 1990.

On July 30, the Staff forwarded for our approval a joint motion of Mr. Dickherber and the NRC Staff for approval of a Settlement Agreement. The motion states that Commonwealth Edison Company, the facility licensee, does not oppose the motion. In situations such as that presented by these proceedings, where a Notice of Hearing has been issued, we are authorized to approve



termination of a proceeding on the basis of a settlement agreement, "according due weight to the position of the staff." 10 C.F.R. § 2.203.

The Settlement Agreement forwarded to us provides several discrete conditions. First, Mr. Dickherber admits the allegations of fact set forth in both orders and withdraws his request for a hearing as to these orders.

Second, the Staff indicates that it has concluded that the October 17, 1989 incident appears to have been an isolated event, based on Mr. Dickherber's answer and supplemental answer, two letters (dated June 4, 1990, and July 11, 1990) to Region III, NRC, submitted by Commonwealth Edison concerning Mr. Dickherber's past performance and his acceptance of Commonwealth Edison's "Individual Performance Monitoring and Improvement Plan" (Remediation Program), and an enforcement conference on July 13, 1990. On the same basis, the Staff has concluded that Mr. Dickherber has properly carried out responsibilities in the past, understands the gravity of his actions on October 17, 1989, is committed to avoid a repetition of such actions and is willing to participate in the Remediation Program, and accordingly that Mr. Dickherber's license should not be revoked.

Third, the Staff finds that successful completion of the Remediation Program by Mr. Dickherber should provide the requisite reasonable assurance for Mr. Dickherber's resuming licensed activities and that the Regional Administrator of Region III will relax as necessary the condition in the Quad Cities plant operating licenses prohibiting Mr. Dickherber's participation in licensed activities, provided that Mr. Dickherber participates in the Remediation Program. The agreement further states that Commonwealth Edison has agreed to notify the Regional Administrator, Region III, promptly if Mr. Dickherber should cease participation in the Remediation Program.

Finally, the agreement states that upon successful completion of the Remediation Program, as determined by the Staff, but no sooner than March 17, 1991, the Staff will withdraw its order suspending Mr. Dickherber's license and the Region III Administrator will terminate the condition in the Quad Cities facility license precluding Mr. Dickherber from performing licensed activities.

At our request, the Staff on July 31, 1990, forwarded to the Board copies of the two letters from Commonwealth Edison, including the Remediation Program. The letters included an evaluation of Mr. Dickherber's work history for the past 25 years, together with the results of a satisfactory medical evaluation performed by Commonwealth Edison. The Remediation Program seeks to implement a staged return of Mr. Dickherber to various productive work activities, under diminishing levels of supervision. Commonwealth Edison states, however, that it will "most assuredly seek the concurrence of Region III before reassigning [Mr. Dickherber] to SROL [Senior Reactor Operator License] duties." (Letter to Region III, NRC, dated July 11, 1990, at 2.)

The Board regards this agreement as fair to both parties, taking into account the isolated nature of the incident as well as the seriousness of Mr. Dickherber's failure to notify appropriate officials promptly of the incident. With reference to the criteria in 10 C.F.R. § 2.203, the settlement accords due weight to the position of the Staff, which has stated that termination of the proceeding on the basis of the Settlement Agreement is in the public interest. On that basis, we are approving the Settlement Agreement and terminating both proceedings subject to that agreement.

For the foregoing reasons, it is, this first day of August 1990, ORDERED:

1. The Settlement Agreement between Mr. Robert L. Dickherber and the NRC Staff, governing both proceedings before us, is hereby *approved*.

2. Pursuant to 10 C.F.R. § 2.203, the two proceedings are *terminated*, subject to the terms and conditions of the Settlement Agreement.<sup>1</sup>

3. This final order is effective immediately and, as provided by 10 C.F.R. § 2.760, becomes the final action of the Commission 30 days after its date.

THE ATOMIC SAFETY AND  
LICENSING BOARD

Charles Bechhoefer, Chairman  
ADMINISTRATIVE JUDGE

Dr. Jerry L. Kline  
ADMINISTRATIVE JUDGE

Gustave A. Linenberger, Jr.  
ADMINISTRATIVE JUDGE

Bethesda, Maryland  
August 1, 1990

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<sup>1</sup> Because the form of the Settlement Agreement submitted for our approval had not yet been signed by all parties, our termination of the proceedings is subject to the approval (and signatures) of all parties or their representatives to the Settlement Agreement unchanged from that provided to us.



UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

**ATOMIC SAFETY AND LICENSING BOARD**

**Before Administrative Judges:**

Charles Bechhoefer, Chairman  
Dr. James H. Carpenter  
Dr. Emmeth A. Luebke

In the Matter of

Docket Nos. 50-424-OLA  
50-425-OLA  
(ASLBP No. 90-617-03-OLA)  
(Facility Operating License  
Nos. NPF-68, NPF-81)

GEORGIA POWER COMPANY, *et al.*  
(Vogtle Electric Generating Plant,  
Units 1 and 2)

August 16, 1990

In a proceeding involving a proposed amendment to an operating license technical specification, the Licensing Board considers the admissibility of a petition for intervention, establishes filing dates for further submissions, and schedules a prehearing conference to consider this question.

**RULES OF PRACTICE: INTERVENTION**

Under governing rules, to be admitted to a proceeding, a potential intervenor must demonstrate that it has standing to participate and must proffer at least one acceptable contention. Contentions need not appear in the intervention petition itself but, rather, are to be set forth in a supplement filed not later than 15 days before the first prehearing conference.



**RULES OF PRACTICE: INTERVENTION PETITION**

A potential intervenor may amend its intervention petition *without leave of the Board* until 15 days prior to the first prehearing conference. 10 C.F.R. § 2.714(a)(3).

**RULES OF PRACTICE: STANDING TO INTERVENE**

A petitioner for intervention in an NRC proceeding may not base its standing on reference to its participation in other proceedings, both NRC and otherwise.

**RULES OF PRACTICE: STANDING TO INTERVENE**

To establish standing to participate in a particular proceeding, a petitioner must show that the subject matter of the proceeding will cause "injury in fact" and that the injury is arguably within the "zone of interests" protected by the Atomic Energy Act of 1954, as amended, or the National Environmental Policy Act, as amended.

**RULES OF PRACTICE: INTERVENTION PETITION (GROUP)**

Where a petitioner for intervention is a group or organization, it may establish standing either through its own organizational interests or through the interests of its members. In past reactor licensing or license-amendment proceedings, residence or employment of a petitioner within 50 miles of a facility has been sufficient to demonstrate that a petitioner's interest may be affected by the proceeding.

**RULES OF PRACTICE: INTERVENTION PETITION (GROUP)**

If representing the interests of one of its members, a group must demonstrate by affidavit of that member that it is authorized to represent that member. The group must also demonstrate that it has authorized the representative appearing on its behalf to represent the group's interest.

**MEMORANDUM AND ORDER**  
**(Intervention Petition)**

This proceeding involves the request of Georgia Power Co., *et al.* (hereinafter, Applicants) to amend the operating licenses for Vogtle Electric Generat-

ing Plant, Units 1 and 2, to revise the Technical Specification (TS) Surveillance Requirement § 4.8.1.1.2h(6)(c) to permit the high jacket water temperature trip to be bypassed to minimize the potential for spurious diesel generator trips in the emergency start mode. Pending before us is the petition to intervene filed on July 23, 1990, by Georgians Against Nuclear Energy ("GANE"). By responses dated August 7, 1990, and August 13, 1990, the Applicants and NRC Staff, respectively, have opposed the petition. Because we do not agree that the GANE petition may at this time be rejected on its face, we are hereby scheduling a prehearing conference to consider the petition (including any supplement filed) and setting a schedule for the filing of such a supplement.

The intervention provisions applicable to this proceeding are set forth in 10 C.F.R. § 2.714(a), as amended effective September 11, 1989 (54 Fed. Reg. 33,168 (Aug. 11, 1989)). Under those rules, to be admitted to a proceeding, a potential intervenor must demonstrate that it has standing to participate and must proffer at least one acceptable contention. Contentions need not appear in the intervention petition itself but, rather, are to be set forth in a supplement to the intervention petition filed not later than 15 days prior to the first prehearing conference. 10 C.F.R. § 2.714(b)(1). Further, a potential intervenor may amend its intervention petition *without leave of the Board* until 15 days prior to the first prehearing conference. 10 C.F.R. § 2.714(a)(3). As we shall see, it is this latter provision which saves the GANE petition from summary dismissal.

As the Applicant and Staff point out, the one-page petition before us fails to include an adequate demonstration of standing — i.e., a statement of the petitioner's interests in the proceeding and of how those interests may be affected by the proceeding. GANE attempts to incorporate by reference statements of standing filed in other proceedings in which it has participated, both NRC and otherwise. Standing in a non-NRC proceeding is not relevant to standing before us, at least in the absence of a showing (not here made) of the equivalence of applicable standards and an overlap of relevant issues. With respect to NRC, GANE participated in the operating license proceeding for this facility, which took place a number of years ago and was of different scope than the current proceeding. See *Georgia Power Co.* (Vogtle Electric Generating Plant, Unit: 1 and 2), LBP-84-35, 20 NRC 887, 916 (1984). GANE's interest in that proceeding may not be the same as its interest (if any) in this proceeding.

To establish standing to participate in a particular proceeding, a petitioner must show that the subject matter of the proceeding will cause an "injury in fact" and that the injury is arguably within the "zone of interests" protected by the Atomic Energy Act of 1954, as amended, or the National Environmental Policy Act, as amended. See *Florida Power & Light Co.* (St. Lucie Nuclear Power Plant, Units 1 and 2), CLI-89-21, 30 NRC 325, 329 (1989). Further, where (as here) a petitioner is a group or organization, it may establish standing either through its own organizational interests or through the interests of its



members. *Houston Lighting and Power Co.* (South Texas Project, Units 1 and 2), ALAB-549, 9 NRC 644, 647 (1979).

As a group, the proposed intervenor has failed to set forth how any of its interests, or those of its members, will be affected by the instant proceeding. In past reactor licensing or license-amendment proceedings, residence or employment of a petitioner or group member within 50 miles of a facility has been sufficient to demonstrate that a person's interest may be affected by the proceeding. See, e.g., *Tennessee Valley Authority* (Watts Bar Nuclear Plant, Units 1 and 2), ALAB-413, 5 NRC 1418, 1421 n.4 (1977); *Houston Lighting and Power Co.* (South Texas Project, Units 1 and 2), LBP-79-10, 9 NRC 439, 443-44 (1979), *aff'd*, ALAB-549, *supra*; *Virginia Electric and Power Co.* (North Anna Nuclear Power Station, Units 1 and 2) ALAB-522, 9 NRC 54, 56 (1979).

In that connection, if representing the interests of a member, a group must demonstrate by affidavit of that member that it is authorized to represent that member. Moreover, the group must also demonstrate that it has authorized the particular representative appearing before us — in this case, Ms. Glenn Carroll — to represent the group's interest. See *South Texas*, *supra*, ALAB-549, 9 NRC at 646. None of this type of information appears in the petition before us.

An intervention petition also must set forth the aspect or aspects of the subject matter of the proceeding as to which the petitioner wishes to intervene. In the paragraph numbered 3 of its petition, GANE appears to have satisfied this requirement, although we express no opinion at this time on the relevance to the proceeding of the various statements in the paragraph.

The Applicants have taken the position that the proposed intervenors may not even be requesting a hearing but only seeking to comment on the Staff's "no significant hazards condition" finding. We reject that approach. Although GANE did not formally request a hearing, the group did seek to "intervene" and, in our view, could not have practically done so without implicitly requesting a hearing in which to intervene. Further, any request filed on July 23, 1990, the date of GANE's petition, to address the Staff's finding would have been untimely, whereas a request for a hearing filed on that date is timely filed. For these reasons, we are treating GANE's petition as a request for a hearing and a petition for leave to intervene.

In addition to the standing requirements outlined above, to become a party to the proceeding GANE must file at least one acceptable contention. Under the revised criteria referenced above, each contention must include, *inter alia*, a specific statement of the issue of law or fact to be raised or controverted. In addition, each contention must include the following information:

- (1) A brief explanation of the bases of the contention;
- (2) 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 and expert opinion:

(3) Sufficient information (which may include that provided under paragraphs (1) and (2) above) 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 the 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. On issues arising under the National Environmental Policy Act, the petitioner shall file contentions based on the applicant's environmental report. The petitioner can amend those contentions or file new contentions if there are data or conclusions in the NRC draft or final environmental impact statement, environmental assessment, or any supplements relating thereto, that differ significantly from the data or conclusions in the applicant's document.

10 C.F.R. § 2.714(b)(2).

As we have suggested, the GANE petition in its present form is grossly deficient in its statement of the group's standing. We reiterate, however, that GANE has an unlimited right to amend its petition until 15 days prior to the first prehearing conference. Accordingly, we are hereby scheduling a prehearing conference for Wednesday, September 19, 1990, and establishing Tuesday, September 4, 1990, as the final date on which GANE may submit (mail) an amendment to its petition to enhance its statement of standing. We are also establishing the same date, September 4, 1990, as the final date on which GANE may file a supplement to its intervention petition setting forth the contentions it wishes to assert in this proceeding. We will permit the Applicants and Staff to respond to any supplementary GANE filings, as long as any such responses are received by us (by FAX if necessary) no later than Friday, September 14, 1990. (If it appears that the statement of standing is clearly inadequate, based on the supplementary statement, we may dismiss the proceeding prior to the prehearing conference.)

One further matter warrants our brief comment at this time. By telephone, we requested the NRC Staff to forward to the Board copies of the Staff's Safety Evaluation Report, as well as the proposed license amendment submitted on May 25, 1990. The Staff has complied with this request. After examining these materials, we request the Applicants to clarify why they added a vague footnote to their technical specifications rather than deleting the phrase "high jacket water temperatures" from Technical Specification Surveillance Requirement 4.8.1.1.2h(6)(c). Further, does the footnote in question permit bypass in other than emergency conditions? The Applicants may respond to these questions at the prehearing conference or, if they wish, in any response they file to GANE's supplemented petition.

The September 19, 1990, prehearing conference is scheduled to be held at the Federal Trade Commission, Room 1010, 1718 Peachtree St., N.W., Atlanta,

Georgia, beginning at 9:30 a.m. Although we are authorized to entertain limited appearance statements during the course of this proceeding, in accordance with 10 C.F.R. § 2.715(a), we will not permit oral statements at this particular conference.

IT IS SO ORDERED.

FOR THE ATOMIC SAFETY  
AND LICENSING BOARD

Charles Bechhoefer, Chairman  
ADMINISTRATIVE JUDGE

Bethesda, Maryland  
August 16, 1990

UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

ATOMIC SAFETY AND LICENSING BOARD

Before Administrative Judge:

Peter B. Bloch

In the Matter of

Docket Nos. 70-00270  
30-02278-MLA  
(ASLBP No. 90-613-02-MLA)  
(Re: TRUMP-S Project)  
(Byproduct License  
No. 24-00513-32;  
Special Nuclear Materials  
License No. SNM-247)

CURATORS OF THE  
UNIVERSITY OF MISSOURI

August 24, 1990

The presiding officer in this Subpart L proceeding denied a request for a temporary stay of Licensee's planned experiments with neptunium and plutonium. He said that he understood why the documents available to Intervenors has caused them concern about the safety of the planned work. However, after reviewing the detailed technical response filed by Licensee, the presiding officer was satisfied that none of the grounds for a stay existed and he denied the stay.

**RULES OF PRACTICE: SUBPART L; REQUEST FOR TEMPORARY STAY**

Pursuant to 10 C.F.R. § 2.1263, the presiding officer may issue a stay in response to Intervenors' motion for a stay, which they included with their request for a hearing. In this case, the presiding officer had deferred action on the stay motion included with the request. Hence, the terms of section 2.1263 refer to 10



C.F.R. § 2.788 for the standards governing the granting of a stay of the Staff's licensing action. Under that section, the criteria for determining whether or not to grant a stay are set forth in subsection (e). Additionally, subsection (g) permits a temporary stay in extraordinary cases, even without waiting for the filing of any answer. In this instance, the presiding officer was able to await an oral answer and a written answer from Licensee before acting on the motion for a temporary stay.

#### **SPECIAL MATERIALS LICENSES AND BYPRODUCT MATERIALS LICENSES**

Applications for special materials licenses and byproduct materials licenses must demonstrate that they are adequate to protect health and minimize danger to life or property pursuant to 10 C.F.R. §§ 30.33(a)(2) and 70.23(a)(3). They must also comply with 10 C.F.R. § 20.106, which limits the extent to which Licensee may release neptunium or plutonium into the air or water in excess of natural background radiation.

These regulations are interpreted in Regulatory Guide 10.3, which requires a detailed description of the equipment, facilities, and instrumentation, and — for chemical or physical processing operations — a description of controls for fire prevention.

#### **TECHNICAL ISSUES DISCUSSED**

The following technical issues are discussed: HEPA filters; DOP testing of HEPA filters; Glove box design; Plutonium, handling of; Neptunium, handling of.

### **MEMORANDUM AND ORDER (Temporary Stay Request)**

#### **Memorandum**

#### **I. SUMMARY**

[This portion of the Memorandum — "I. SUMMARY" — was sent to the parties on August 23, 1990, for the purpose of informing them of the decision on the stay motion. This early notice was promised to the University of Missouri, which had voluntarily suspended its work on neptunium, pending the Board's determination on the motion for a temporary stay. Note that the University of Missouri was initially called "Applicant" but I have corrected this to "Licensee," which is more descriptive.]

Intervenors have requested a temporary stay of work with neptunium and plutonium that the University of Missouri (Licensee) is planning to do in its TRUMP-S project. The initial showing of possible grounds for a stay relied on documents obtained from the Licensee without the assistance of the presiding officer. Those documents indicated that a University consultant, Mr. Steppen, considered that there was a "major design flaw" in the Alpha Laboratory that required the installation of an additional filter device. They also showed that the University of Missouri was sufficiently concerned about the recommendation to order the recommended filter and to consider deferring the start of its experimental program.

Although the documents filed by Intervenors caused me to have enough concern about the safety of the Alpha Laboratory to consider granting a temporary stay, I have now analyzed the answering documents submitted by Licensee. I am persuaded by the affidavit of the University of Missouri-Columbia Research Reactor's (MURR's) Interim Director, Dr. J. Steven Morris, that there is no serious risk either to the health of members of the public or to workers in the Alpha Laboratory. Consequently, after weighing each of the factors required for a stay or temporary stay, I have decided that the request for a temporary stay should be denied.

Although I have considered the possible need for a public hearing to test the testimony offered by Licensee, I have decided that there has not been enough of a showing by Intervenors for me to require such a hearing in this proceeding, which is being conducted under Subpart L of the Commission's procedural regulations.

## II. RELEVANT DOCUMENTS

The relevant documents include Intervenors' Application for Temporary Stay to Preserve the Status Quo, August 20, 1990,<sup>1</sup> and Supplemental Memorandum, August 20, 1990; Licensee's Response to "Intervenors' Application for Temporary Stay to Preserve the Status Quo," August 23, 1990, and affidavits of William J. Adam, filed July 26, 1990, and August 22, 1990. Also relevant, but not relied on in this memorandum, are an Affidavit of Dr. J. Steven Morris, filed June 15, 1990; a Declaration of James C. Wurf and Daniel O. Hirsch, filed June 12, 1990.

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<sup>1</sup> See the Certificate of Service, found in Exhibit 11.

### III. LEGAL AUTHORITY

#### A. Authority to Issue a Temporary Stay

Pursuant to 10 C.F.R. § 2.1263, I have authority to issue a stay in response to Intervenor's motion for a stay, which they included with their request for a hearing. In LBP-90-18, 31 NRC 559, 575-77, 578 (1990), I deferred action on the stay request.

The terms of section 2.1263 refer me to 10 C.F.R. § 2.788 for the standards governing the granting of a stay of the Staff's licensing action. Under that section, the criteria for determining whether or not to grant a stay are set forth in subsection (e). Additionally, subsection (g) permits me to grant a temporary stay in extraordinary cases, even without waiting for the filing of any answer.

In this case, the voluntary action of the University in deferring its work with neptunium made it possible for me to wait for its answer before acting. Thus, there was no harm to Intervenor from my waiting for a response from Licensee and circumstances were therefore not so extraordinary as to permit action before a response was filed.

#### B. Applicable NRC Regulations

Sections 30.33(a)(2) and 70.23(a)(3) of 10 C.F.R. require that "[t]he Licensee's proposed equipment and facilities [be] adequate to protect health and minimize danger to life or property." Part 30 applies to byproduct materials licenses and Part 70 to special nuclear material licenses.

Section 20.106 of 10 C.F.R. limits the extent to which Licensee may release neptunium or plutonium into the air or water in excess of natural background radiation. Additionally, Licensee must keep releases of radiation As Low As Reasonably Achievable (ALARA). 10 C.F.R. § 20.1(c).

### IV. ARGUMENTS

#### A. Intervenor's Arguments

The principal safety ground relied on in the request is that a University of Missouri consultant, Mr. Steppen, found "only one major flaw in the facility design" for TRUMP-S.<sup>2</sup> According to the Steppen Memo, at page 1:

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<sup>2</sup> Memorandum of June 19, 1990, from John Ernst to Charlie McKibben, "Summary of Consultant Visit" (Steppen Memo), attached to Intervenor's Application for Temporary Stay to Preserve the Status Quo.



DOE regulations require two DOP<sup>3</sup> tested HEPA filters between a contamination source and personnel or public. The alpha lab is designed to this standard except for the case of an accidental pressurization of the exhaust line. If that should occur the glove box exhaust could be forced into the occupied area of the alpha lab via the room exhaust. The glove box air would have passed through two sets of HEPA filters, only one of which can be DOP tested.

At a subsequent meeting of the University of Missouri's TRUMP-S Group, held July 19, 1990, the following minute was recorded:

We expect bids for the HEPA filter housings for the exhaust air systems on July 30. With four week delivery, one week installation and testing, the laboratory should be ready for neptunium experiments on September 4. This change was recommended [by] Mr. Steppen, Alpha consultant (see memo from Ernst to McKibben dated June 19, 1990).]

However, the TRUMP-S work with neptunium was scheduled to begin August 22, prior to installation of the HEPA filters. The University of Missouri, at my request, voluntarily deferred its work with neptunium in order to permit me to receive its written response to the request prior to acting on it. Hence, I was able to permit Licensee to respond to the stay request prior to acting on it.

Intervenors would have us believe that commencing work with neptunium or plutonium without the filter recommended by Mr. Steppen does not adequately assure public safety and is being done under contract pressure. They state, on page 4 of their motion, that Steven J. Morris, lab director, filed a June 14, 1990 affidavit stating that the alpha lab was provided with HEPA filters adequate for any emergency, redundant and DOP-tested. They further state, on pages 7-8 of their motion, that:

[T]here is imminent risk posed by operation without the required dual DOP-tested HEPAs. The University has rested virtually its entire assertion of safety on the claim that, in a worst-case accident, one of two DOP-tested HEPA filters would fail or be bypassed and the remaining filter would be able to reliably function, reducing exposures [of the public to radiation] by several orders of magnitude.

## B. Licensee's Arguments

### 1. *No Imminent Risk*

Licensee argues, first, that there is no imminent risk posed by planned operations. It states that the consultant cited by intervenors has not identified any pertinent DOE regulations or requirements that Licensee is violating and

<sup>3</sup>The DOP test is a sophisticated technique for determining the efficiency of the filter in removing particles from the air flow.

that he may have been expressing his beliefs concerning DOE practices.<sup>4</sup> It also states, supported by the Affidavit of Dr. J. Steven Morris, August 23, 1990, §§ 6h and 7d, that the only possible consequence of the scenario set forth by the consultant would be a release of radioactive materials within the laboratory itself and not to any unrestricted areas that could affect the public.<sup>5</sup>

Licensee further shows that even a release within the laboratory would be very unlikely. Mr. Steppen's concern was that:

DGE regulations require two DOP tested HEPA filters between a contamination source and personnel or public. The alpha lab is designed to this standard except for the case of an accidental pressurization of the exhaust line. If that should occur the glove box exhaust could be forced into the occupied area of the alpha lab via the room exhaust. The glove box air would have passed through two sets of HEPA filters, only one of which can be DOP tested.

For the scenario of concern to occur, there must first be an accidental pressurization of the exhaust line, which can only occur if: (1) the emergency exhaust valve is open, and (2) the air pathway through HEPA filters 3 and 4 is completely or almost completely blocked or the damper downstream from filter 4 is closed. See Figure 1, Alpha Laboratory Air Flow Diagram and Morris Affidavit at § 6h. In that instance, the air flow could proceed in a reverse direction through the room exhaust system and back into the room. *Id.*

Licensee has several ways of addressing this possibility. One response is that under this scenario the flow would have passed through HEPA filters 1 and 2. HEPA filter 2 has been DOP tested in place; thus there is no problem about that filter. HEPA filter 1, while not tested in place, was validly tested with respect to its filtering capabilities. Morris Affidavit § 6e. Licensee believes that the testing prior to installation is valid because the installation is simple because:

The filter is installed by screwing the intact tested unit into the receptacle provided. This installation has the same simple mechanical coupling as used to connect devices that contain molecules such as water and natural gas which are smaller than the particles challenging these filter units.<sup>6</sup>

Licensee also does not accept Mr. Steppen's hypothesis that there could be an "accidental pressurization of the exhaust line." *Id.* § 7d. It states that there is no mechanism to pressurize the air. That is, there is no fan or blower that could drive air from the argon glove box to the emergency exhaust line. This

<sup>4</sup> Licensee's Response at 3 n.2.

<sup>5</sup> Although Intervenor has not demonstrated that any of their members are workers in the laboratory and consequently have not shown a litigable interest in protecting the workers, I have analyzed the possible effect on workers because of the important public interest involved.

<sup>6</sup> Morris Affidavit.

is unlike other glove-box facilities in which there are such fans or blowers. *Id.* (See ¶ 7d for additional details concerning argon circulation through a minimum resistance loop, not shown in Figure 1, under the conditions of concern to Mr. Steppen.)

Licensee also states that "since the pressure in . . . filters [3 and 4] is monitored, the possibility that an experiment would be taking place and result in a release to such filters when they are clogged is minimal." *Id.* ¶ 7. Furthermore, if the damper were closed, there would be some pressure increase in the Alpha Laboratory, causing an alarm that would permit corrective action to be taken. *Id.*

Licensee then concludes that applicable NRC requirements have been met and that there is reasonable assurance that the health and safety of both the public and MURR personnel would be protected even if the air flow through HEPA filters 3 and 4 were blocked. It also concludes that it would be inconceivable for there to be pressurization in the exhaust line. *Id.* ¶ 7d. It also states that the postulated multiple problems or failures are remote. *Id.*

## 2. Compliance with Regulatory Guide 10.3

Licensee states that its laboratory complies with Regulatory Guide 10.3. Such regulatory guides are issued by the Staff and are presumptive evidence of compliance with the more general regulations that they interpret. Although they do not prove compliance, persuasive evidence must be introduced to demonstrate the inadequacy of the guide.

In this instance, Regulatory Guide 10.3, cited by Licensee, states in pertinent part:

The equipment, facilities, and radiation detection instrumentation for each site of use should be described in detail. The proposed equipment and facilities for each activity must be adequate to protect health and minimize danger to life and property. In describing available equipment and facilities, the following types of information should be included, as appropriate:

\* \* \* \*

4. Physical plant, laboratory, or working area facilities. A description of all fume hoods, glove boxes, waste receptacles, special sinks, ventilation and containment systems, effluent filter systems, including the design specifications and capabilities of these systems, should be included. . . . Applications for chemical or physical processing operations<sup>7</sup> should include a description of controls for fire prevention and fire fighting equipment available. Sketches showing laboratory or plant arrangements and the nature and use of areas adjacent to areas in which special nuclear materials will be processed should be submitted.

<sup>7</sup> Neither Applicant nor Staff have indicated whether they believe this clause applies to the Alpha Laboratory.



Licensee also attempts to place its compliance with this regulatory guide into context. It states, in Morris Affidavit ¶ 6a, that the guide

is intended for applications to possess and use up to 2000 grams of plutonium, which greatly exceeds the 5 grams of plutonium that Licensee will have in inventory for the TRUMP-S research, and especially the 0.1 grams or less that will be used in any one thermodynamic experiment.

### C. Staff Arguments

Staff's argument concerning the possible need for HEPA filtration in connection with the TRUMP-S work is: (1) 10 C.F.R. does not specify that particular filters are needed, and (2) the Staff has found that it is permissible to license TRUMP-S work under 10 C.F.R. Part 20 with no further filters required to provide an adequate assurance of safety.

Despite my specific invitation, the Staff chose not to be responsive to my expressed needs and has therefore failed to provide any analysis of the reasons for its findings. Memorandum of Telephone Conference Call of August 21, 1990 (unpublished), at 2.

### D. Conclusion

The evidence available to Intervenors caused them serious concern about the safety of permitting Licensee to proceed with its TRUMP-S work with neptunium. That evidence included a memorandum stating that a University consultant, Mr. Steppen, had found a "major design flaw" in the alpha laboratory. It also included a memorandum of a TRUMP-S design group that ordered the additional filter recommended by Mr. Steppen and appeared to make the addition of the filter to the laboratory a necessary condition before the experimentation would continue. The memorandum stated that the "laboratory should be ready for neptunium experiments on September 4" — after the filter was installed.

Now that I have received the answer of Licensee, I am no longer concerned. The Affidavit of J. Steven Morris describes in great detail Licensee's reasons for believing its laboratory to be safe without the filter. The affidavit is accompanied by a figure, which I have attached to this Memorandum and Order, that enables me to follow quite easily Mr. Morris's description of how air would flow under different conditions. Furthermore, the affidavit is well organized and logical, attending to specific details that support the conclusions. It is the kind of careful technical memorandum that not only makes its point but adds to my confidence in the professional competence and carefulness of Mr. Morris and of the research reactor and laboratory that he runs.

I find that the event described by Mr. Steppen is unlikely to occur. HEPA filters 3 and 4 are monitored for pressure; therefore, undetected clogging or operation with clogged filters is very unlikely. Were the damper downstream of HEPA 4 improperly closed, there would be some reverse circulation of air through the room exhaust and a slight overpressurization would occur in the laboratory, setting off an alarm that would permit corrective action with respect to the damper.

Were this unlikely reverse-circulation-of-air event to occur, there would be a natural circulation return through the room exhaust system. The return would not be driven by fans or blowers and therefore would not be at high pressure. Furthermore, the air would pass through two HEPA filters, providing an adequate assurance of safety. It will have passed through HEPA 1 as it left the glove box. (There is one HEPA 1 filter downstream of each of the argon glove boxes.) It also will pass through HEPA 2 shortly after it leaves the Alpha Laboratory in the exhaust line. Additionally, I find that each of these HEPA filters has been tested adequately — HEPA 2 having been tested in place and HEPA 1 having been installed subsequent to testing.

Whatever health risk does exist in this scenario exists within the laboratory itself — a location in which none of the interests of any of the intervenors or petitioners would be compromised since there are no intervenors or petitioners who have been shown to be workers in the laboratory. Hence, no one has standing to raise possible injury within the laboratory as an injury affecting them. It is part of traditional judicial standards of standing that intervenors may not act as private attorneys-general and raise issues that are of concern to them but do not affect them directly.

I am aware that Intervenor, as part of their motion, made various charges of misrepresentation and withholding of information by Licensee. Given what the Intervenor knew, it was proper for them to raise these concerns. I am always concerned with the accuracy and completeness of my record and would pursue these matters in an appropriate fashion were I to agree with the Intervenor. However, these matters are peripheral to the motion before me and I find that they are fully explained by Licensee, when they are understood in relationship to the full technical evidence that has been presented.

With respect to the applicable stay criteria, I find that Intervenor has not demonstrated that there is any problem concerning the adequacy of the safety of the Alpha Laboratory; consequently, they are very unlikely to succeed on the merits of this claim. Since there is no showing that there is a failure in the assurance of the adequacy of safety, there obviously is no irreparable injury from commencing the planned experiment. There obviously is some harm to the University of Missouri were it to be restrained from completing its TRUMP-S contract commitments at this time; hence, this factor is adverse to Intervenor as well. Nor is there any showing that the public interest would be adversely

affected. Consequently, there are no grounds for granting a stay or temporary stay, and the request will be denied.

In closing, I wish to state that I am saddened by the lack of communication that seems to be affecting my relationship to the Staff. I requested their assistance because I sincerely thought I needed their help. Yet their answer provided no reasoning that could be of any help to me. Their naked statement that they reviewed the Application and found it to be adequate is not helpful in evaluating specific grounds presented by Intervenors. In this instance, Licensee's proof was sufficient to establish the appropriateness of the position urged by the Staff. However, I could not know what proof Licensee would present when I made the Staff a party for a limited purpose. I regret their continuing unwillingness to provide helpful information with respect to a live issue that I had a duty to decide.<sup>8</sup>

Although it is not clear that I am permitted to hold a hearing in which I could ask questions of Mr. Morris and Mr. Steppen to test the adequacy of the conclusions I have reached, I nevertheless considered that possibility. The reason for considering that step is that the examination of witnesses is such an important part of our jurisprudence and because Intervenors were prohibited even from commenting on Licensee's proof by 10 C.F.R. § 2.788(d), which states that, "No further replies to answers [to motions for a stay] shall be entertained."

In this instance, the Temporary Stay motion relied on one of Licensee's consultants and the response consisted of an affidavit rebutting the grounds for the first consultant's opinions. Given the completeness of the responsive affidavit, the fact that neither of the witnesses involved in the papers was sponsored by Intervenors, and the preference of Subpart L for avoiding hearings, I decided not to hold a hearing with respect to the motion for a temporary stay.

### Order

For all the foregoing reasons and upon consideration of the entire record in this matter, it is, this 24th day of August 1990, ORDERED, that:

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<sup>8</sup> I acknowledge that the Staff had very short notice and I recognize that some of their unwillingness could have resulted from the time pressure under which my Order placed them. Under the circumstances, I also felt under time pressure and asked for the Staff's help at a time that I needed it.

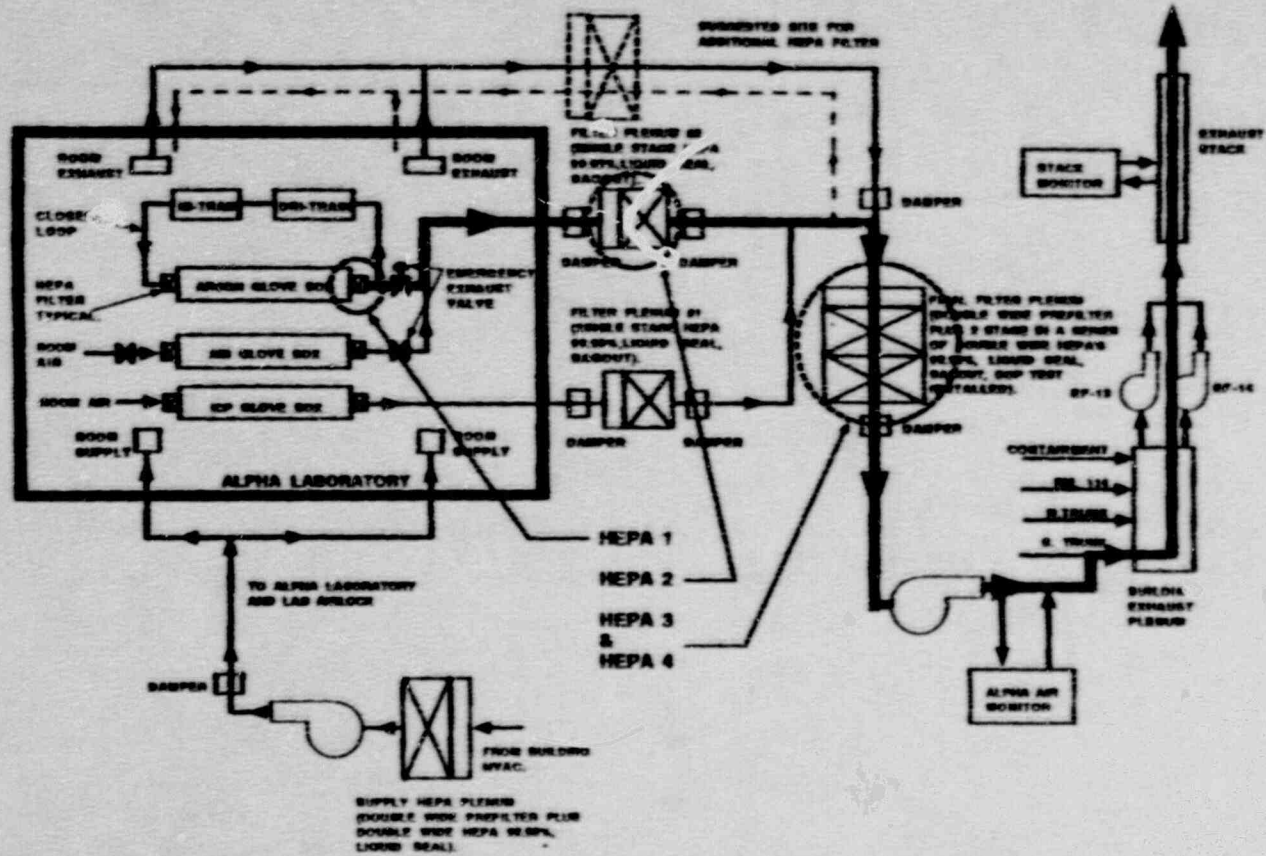


Intervenors' Application for Temporary Stay to Preserve the Status Quo, August 20, 1990, is *denied*.

Respectfully ORDERED,

Peter B. Bloch, Presiding Officer  
ADMINISTRATIVE JUDGE

Bethesda, Maryland



ATTACHMENT

Attachment 1 of Morris Affidavit  
 No. 4 (revised with detail  
 enhancements as of 8/22/80)

### ALPHA LABORATORY AIR FLOW DIAGRAM

BASEMENT LEVEL - RESEARCH REACTOR  
 UNIVERSITY OF MICHIGAN - COLUMBIA  
 8/19/80

UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

ATOMIC SAFETY AND LICENSING BOARD

Before Administrative Judges:

Morton B. Margulies, Chairman  
Dr. A. Dixon Callihan  
Dr. Jerry R. Kline

In the Matter of

Docket No. 30-12319-CivP  
(ASLBP No. 90-618-03-CivP)  
(EA 89-223)  
(Material License  
No. 35-17178-01)

TULSA GAMMA RAY, INC.

August 29, 1990

**NOTICE OF HEARING AND OTHER MATTERS**

Notice is hereby given that at the request of Licensee Tulsa Gamma Ray, Inc., of Tulsa, Oklahoma, a hearing will be conducted in the captioned proceeding in accordance with the provisions of Subparts B and G of Part 2 of Title 10 of the *Code of Federal Regulations* (10 C.F.R. Part 2, Subparts B and G). The time and place of hearing will be by further notice.

On June 6, 1990, the Deputy Executive Director for Nuclear Materials Safety, Safeguards, and Operations Support issued an Order titled "Order Imposing Civil Monetary Penalty" (55 Fed. Reg. 24,949-52).

The Order stated that on December 29, 1989, a Notice of Violation and Proposed Imposition of Civil Penalty was issued for violations identified during an October 2-4, 1989 inspection for which a \$7,500 penalty was proposed. The Order further stated that the Licensee responded to the Notice of Violation on February 22, 1990, admitting nine of the ten alleged violations and requested reconsideration of the civil penalty for a variety of reasons.



The Order recited that based on NRC Staff's evaluation of the Licensee's response, it concluded that nine of the ten violations occurred as stated and that one alleged violation should be withdrawn. Because of the withdrawal of one of the ten violations alleged, the penalty of \$7,500 was also reduced by ten percent to \$6,750. No other grounds were accepted by Staff to further reduce the penalty.

The Order provided Tulsa Gamma Ray, Inc., the opportunity to request a hearing, the issue to be considered "shall be whether, on the basis of the violations admitted by the Licensee, consisting of the violations set forth in the Notice of Violation as modified by the withdrawal of Violation 3, [the] Order shall be sustained."

By letter dated July 3, 1990, Licensee requested a hearing and filed a request for reconsideration of the imposition of the civil penalty. In a letter dated July 31, 1990, the Director of the Office of Enforcement refused to withdraw its June 6, 1990 Order. As a result, this formal adjudicatory proceeding was initiated.

This Board requests that, before it conducts the hearing offered by Staff and requested by Licensee, the parties confer and consider steps that will expedite the proceeding and reduce its costs. The matters to be considered should include the establishment of a schedule for further actions in the proceeding, the identification of witnesses, the simplification of issues, and any other matters that may aid in the orderly disposition of the proceeding.

The parties should also consider settlement, a process encouraged by the Commission. Settlement can provide an expeditious and cost-effective way of resolving the dispute.

The parties shall, by letter, report back to the Board, no later than September 21, 1990, the results of their discussions. Future prehearing and hearing scheduling will depend on the achievements of the parties.

It is so ORDERED.

FOR THE ATOMIC SAFETY AND  
LICENSING BOARD

Morton B. Margulies, Chairman  
ADMINISTRATIVE LAW JUDGE

Bethesda, Maryland  
August 29, 1990

Directors'  
Decisions  
Under  
10 CFR 2.206

**DIRECTORS' DECISIONS**

UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

OFFICE OF NUCLEAR REACTOR REGULATION

Thomas E. Murley, Director

In the Matter of

Docket No. 50-443

**PUBLIC SERVICE COMPANY OF  
NEW HAMPSHIRE, et al.**  
(Seabrook Station, Unit 1)

August 31, 1990

In an Emergency Motion filed before the Commission on behalf of New England Coalition on Nuclear Pollution, Seacoast Anti-Pollution League, and the Commonwealth of Massachusetts (Petitioners) in the U.S. Nuclear Regulatory Commission's (NRC's) licensing proceeding for the Seabrook Station, Unit 1, Petitioners alleged the existence of recent, previously undisclosed industry reports of extensive and serious regulatory noncompliance at Seabrook. Petitioners argued that these materials (certain reports prepared by the Institute for Nuclear Power Operations (INPO)) demonstrated that the NRC had no valid technical basis for finding that Seabrook Station Unit 1 of the Public Service Company of New Hampshire, et al. (Licensee) complied with the NRC's regulations and was safe to operate.

The Motion was referred to the Director of the Office of Nuclear Reactor Regulation (NRR) for preparation of a response pursuant to 10 C.F.R. § 2.206.

The Director of NRR has reviewed the INPO reports referred to by Petitioners and has found the allegations not to be substantiated. The INPO reports on which the allegations were founded do not indicate that the Seabrook facility is out of conformance with NRC requirements or that it is unsafe to operate. The Licensee's corrective actions were appropriate and responsive to the INPO findings. Consequently, the Director of NRR determined that no action pursuant to section 2.206 need be taken in this matter.



## DIRECTOR'S DECISION UNDER 10 C.F.R. § 2.206

### I. INTRODUCTION

By letter dated March 14, 1990, Ms. Diane Curran, Esq., filed an Emergency Motion with the Commission on behalf of New England Coalition on Nuclear Pollution, Seacoast Anti-Pollution League, and the Commonwealth of Massachusetts, (Intervenors) in the U.S. Nuclear Regulatory Commission's (NRC's) licensing proceeding for the Seabrook Station, Unit 1. Intervenors' motion was based on alleged recent, previously undisclosed industry reports of extensive and serious regulatory noncompliance at Seabrook. Accompanying the motion was the affidavit of Robert Pollard and the testimony of Mr. Pollard and Ralph Nader presented before the Subcommittee on General Oversight and Investigations, Committee on Interior and Insular Affairs, U.S. House of Representatives, during a hearing on March 14, 1990. The motion argued that these materials demonstrated that the NRC had no valid technical basis for finding that Seabrook Station Unit 1 of the Public Service Company of New Hampshire, et al. (PSNH or Licensee) complied with the NRC's regulations and was safe to operate.

In an Order issued on March 15, 1990 (unpublished), the Commission denied the Emergency Motion which sought an extension of the stay of full-power operation issued by the Commission in its Memorandum and Order of March 1, 1990.<sup>1</sup> In CLI-90-3, the Commission authorized the Director of NRR to issue a full-power license consistent with the provisions of CLI-90-3 for a housekeeping stay. In its March 15, 1990 Order, the Commission concluded that no extension was needed to fulfill the purpose of the stay provided for in CLI-90-3. Moreover, the Commission noted that the motion failed to address the stay factors specified in 10 C.F.R. § 2.788.

Prior to issuance of a full-power license for Seabrook Unit 1, the NRC Staff reviewed the substance of the information on which the Emergency Motion is based. Specifically, both the Regional and Headquarters staffs reviewed the three Institute for Nuclear Power Operations (INPO) reports cited in the congressional testimony. Based on the Staff's review, I concluded that there was no information in the three INPO reports that would change the Staff's conclusion that there was reasonable assurance that the Seabrook facility could be operated safely. Accordingly, on March 15, 1990, I issued the full-power license for Seabrook.

On March 15, 1990, the Intervenors' Motion (Petition) was referred to my Office for the preparation of a response pursuant to 10 C.F.R. § 2.206. A letter

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<sup>1</sup> CLI-90-3, 31 NRC 219 (1990).

acknowledging receipt of the Petition and its status as a Petition for consideration pursuant to section 2.206 was sent to Intervenors on April 9, 1990.

## II. BACKGROUND

Prior to responding to the Petition, an explanation of INPO and how its evaluation reports relate to the NRC's regulatory process is necessary. INPO is an industry group, a non-profit organization funded by member utilities, which was created following the Three Mile Island accident in 1979. INPO performs a number of functions for its members, including conducting periodic inspections of operating nuclear plants, plants under construction, and corporate organizations. These periodic inspections are documented as INPO Appraisal/Evaluation reports, which are the reports referred to in the Petition.

The relationship between the NRC and INPO reflects the desire for a cooperative relationship in the exchange of experience, information, and data related to the safety of nuclear power plants. In an October 1988 "Memorandum of Agreement" (MOA) signed by the NRC and INPO, the provisions for coordination in regard to INPO appraisals and evaluation activities were discussed. Included are provisions that INPO expects its member utilities to make operating plant evaluation reports available to the NRC for review. Further, INPO will make final evaluation reports available to the NRC for review by appropriate NRC management personnel at the INPO offices in Atlanta. It should be noted, however, that these INPO documents and information are of a proprietary nature, are not publicly available, and NRC access is in the interest of improving nuclear plant safety.

INPO has no regulatory authority. INPO recommendations in each area are based on what it views as best practices, rather than on NRC standards or requirements. Accordingly, areas where improvements are recommended are not necessarily indicative of unsatisfactory performance or noncompliance with NRC requirements.

In the event that an INPO evaluation revealed that a licensee failed to comply with a legally binding requirement such as a rule, license condition, or Technical Specification, the NRC Staff would evaluate the situation and take the appropriate action pursuant to the NRC's "General Statement of Policy and Procedure for NRC Enforcement Actions," 10 C.F.R. Part 2, Appendix C (Enforcement Policy). Further, under such NRC regulations as 10 C.F.R. §§ 50.55(e), 50.72, and 50.73, a licensee's failure to report significant violations or safety deficiencies revealed in such documents (such as INPO reports) is subject to enforcement action under that Enforcement Policy.

### III. DISCUSSION

The bases for the Intervenor's (hereinafter Petitioners) request are its allegation that issues raised in certain INPO reports describe a wide array of "serious safety deficiencies" at the Seabrook plant, including: inadequate training of maintenance personnel and radioactive waste technicians, continuing failures by plant personnel to follow procedures, the permanent installation of equipment not shown on plant drawings or included in plant procedures, the lack of staffing for the solid waste radioactive waste handling group, the lack of an effective check valve preventative maintenance program despite numerous check valve failures, and failure to complete a design review of check valves.<sup>2</sup> The Petitioners also indicate that PSNH stated in the reports that it does not plan to correct a number of the deficiencies until well after the plant is licensed.

On these bases, the Petitioners allege that these reports raise such grave new issues of regulatory noncompliance as to completely undermine the NRC's previous conclusion that the Seabrook reactor is ready for safe operation at full power and ask that the license be denied or revoked.

On March 14, 1990, the Staff requested that the Licensee provide a response to the March 13, 1990 testimony presented by Ralph Nader and Robert D. Pollard to the Subcommittee on General Oversight and Investigations. On March 15, 1990, the Licensee provided its Response, including copies of the three INPO reports referenced in the congressional testimony. In addition, the Licensee provided a status update of its actions for each INPO finding or observation and the correlation of the INPO finding with the corresponding allegation presented in the congressional testimony. The Licensee concluded, from its review of the INPO findings from the three reports in question, that its existing programs and practices related to each item exceeded regulatory requirements.

In its Response, the Licensee emphasized that the allegations described as "serious safety deficiencies" mischaracterized the nature of the INPO findings. The Licensee maintained that the INPO findings and recommendations are based on best practices, rather than minimum acceptable standards or requirements, and are not indicative of unsatisfactory performance.

The Licensee also discussed INPO's policy that, if INPO observes a situation that is reportable in accordance with NRC requirements, INPO will encourage the utility to report the matter. If the utility does not report the matter, INPO will do so. The Licensee asserted that, in the course of the INPO visits at Seabrook Station, no reportable matters were identified. The Licensee also indicated its

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<sup>2</sup>The specific INPO reports referred to by Petitioners are "Trip Report — Special Assistance Visit to Seabrook Station," dated February 8, 1988, "Evaluation of Seabrook Station," dated September 1989, and "Evaluation of Public Service Company of New Hampshire, New Hampshire Yankee Division's Corporate Support and Monitoring of Seabrook Station from October 2 through 6, 1989," dated December 26, 1989.



belief that there were no existing safety issues or concerns and no issues that would prevent the safe, conservative startup and operation of Seabrook Station upon issuance of a full-power operating license.

The Staff reviewed and evaluated each of the issues raised by the Petitioners as well as the Licensee's response to each issue. Each of the specific issues raised by the Petitioners is characterized below, followed by the Staff's evaluation. The issues are presented in the following order:

1. INPO Trip Report dated February 8, 1988 (3 issues)
2. INPO Evaluation dated September 1989 (8 issues)
3. INPO Evaluation dated December 26, 1989 (4 issues)

#### **A. Issues Discussed in INPO Trip Report Dated February 8, 1988**

##### ***Issue #1***

Petitioners quoted an INPO finding that several New Hampshire Yankee (NHY) employees did not know their complete assigned duties and had never seen a position (job) description. A specific example cited was that no position description was available describing all of the duties and functions of the Radiological Assessment Manager.

This INPO observation related to the Seabrook Station emergency preparedness efforts and organization. In its Response, the Licensee indicated that, at the time of the audit, the organization had not yet been stabilized and personnel reassignment to handle priority issues was common. The Licensee indicated that it is probable that some of the personnel interviewed as part of the basis of this INPO observation are now in entirely new assignments or, possibly, are no longer with Seabrook. This issue has been addressed by the Licensee with the development and distribution of job descriptions for Emergency Planning staff positions and the reduction in staffing to a constant workforce. With regard to the Radiological Assessment Manager, the Licensee redefined this position to that of the Radiological Technical Specialist in plant procedures and has re-assigned certain responsibilities to other Emergency Planning staff positions.

The Staff has reviewed and evaluated the Licensee's actions set out in its Response to the INPO findings. The Licensee's corrective actions, if properly implemented, should be sufficient to ensure that Emergency Planning staff position duties and responsibilities are adequately documented and that personnel are aware of their responsibilities. The Staff considers the Licensee's corrective actions to be appropriate and responsive to the INPO findings.

In addition, subsequent to the issuance of the INPO Trip Report documenting the above findings, three separate emergency preparedness (EP) inspections were conducted at Seabrook Station by NRC EP specialists. These inspections are documented in NRC Region I Inspection Reports (IR) 50-443/88-03, 89-02,

and 90-01. Areas of inspection included the Seabrook EP organization and the Seabrook staff's knowledge and performance of duties. The specific INPO findings were encompassed within the scope of the NRC inspections. Seabrook personnel knowledge and performance of duties were noted in IR 50-443/90-01 as being in compliance with 10 C.F.R. § 50.47(b) and section IV of Appendix E to 10 C.F.R. Part 50. The creation of the Seabrook staff position of Radiation Technical Specialist was noted in IR 50-443/90-01. The inspection determined that the Licensee's emergency organization continued to meet the requirements of section 50.47(b) and section IV of Appendix E to 10 C.F.R. Part 50.

Based on the NRC inspections conducted in the areas of Seabrook emergency preparedness and the Staff's assessment of Licensee's corrective actions in response to the INPO findings, the Staff has concluded that the issues raised by INPO have been satisfactorily addressed by the Licensee and that they do not present a significant health or safety issue.

#### *Issue #2*

Petitioners quoted an INPO finding discussing an inconsistency between the Emergency Plan and the Emergency Plan implementing procedures and/or how the Plan is actually implemented. Petitioners also cited INPO findings indicating that revisions to onsite procedures were being made through unauthorized, undocumented methods that shortcut the approved process.

In its Response, the Licensee stated that discrepancies between the Emergency Plan and its implementing procedures had been corrected through a series of revisions. These revisions have been in accordance with an established administrative procedure which requires a series of reviewer approvals, including an independent review by the Station Operations Review Committee (SORC) and final Station Manager approval. This administrative procedure has been in effect since August 19, 1988.

The Staff has reviewed and evaluated the Licensee's actions in response to the INPO finding. The Licensee's corrective actions included actions to correct the noted inconsistency and to establish controls to prevent similar problems from recurring. The Staff's assessment is that the Licensee's corrective actions adequately address the INPO findings.

In addition to the three NRC inspections of EP activities noted previously, two EP exercises were observed by NRC inspectors since the INPO Trip Report was issued. The results of these inspections are documented in IRs 50-443/88-09 and 89-10. The inspection of the EP exercise conducted in September 1989 resulted in an overall conclusion, as stated in IR 50-443/89-10, that observed Licensee activities in the areas of EP were consistent with the emergency response plan and implementing procedures and that no exercise weaknesses are identified.

The Licensee's Change Control Program is discussed in IR 50-443/89-02. This IR documents that procedural changes are approved only after the conduct of an internal review which results in the conclusion that the revision does not negatively impact the emergency plan. Additionally, several emergency plan and implementing procedure changes were reviewed by NRC inspectors, as documented in IR 50-443/90-01, and found to have been satisfactorily controlled.

Based on the NRC inspections conducted in the areas of Seabrook emergency preparedness and the Staff's assessment of Licensee's corrective actions in response to the INPO findings, the Staff has concluded that these issues raised by INPO have been satisfactorily addressed by the Licensee and do not present a significant health or safety issue.

### *Issue #3*

Petitioners quoted an INPO finding discussing deficiencies in the Emergency Preparedness training program including a failure of the then-current training program to comply with the applicable procedural requirements and a finding that the training instructors were not being selected or qualified in accordance with specified criteria.

The Licensee stated in its Response that the training procedures referenced in the INPO finding were developed for operator training and were not applicable for other training programs. The Licensee has since developed a series of Nuclear Training (NT) procedures and revised the Emergency Plan implementing procedure to be consistent with the NT procedures. The Licensee did not explicitly discuss the issue of training instructor selection or qualification as noted in the INPO finding. However, the Staff discussed this issue with the Licensee and was informed that the NT procedures specify training instructor selection and qualification criteria.

The Staff has reviewed and evaluated the Licensee's actions in response to the INPO finding. The Staff considers the Licensee's corrective actions involving the development of a series of NT procedures and revising the Emergency Plan implementing procedure to be appropriate responses to the INPO findings.

With regard to EP training, an NRC inspection determined that the Licensee's Fully Integrated Nuclear Information System tracks training requirements and requalification time periods, while maintaining the correct status of training records. The inspection, conducted in January 1990, and documented in IR 50-443/90-01, also noted that EP training at Seabrook was being conducted in compliance with section 50.47(b) and section IV.F of Appendix E to 10 C.F.R. Part 50.

Based on the NRC inspections conducted in the areas of Seabrook emergency preparedness and the Staff's assessment of Licensee's corrective actions in response to the INPO findings, the Staff has concluded that these issues raised



by INPO have been satisfactorily addressed by the Licensee and do not present a significant health or safety issue.

## **B. Issues Discussed in INPO Evaluation Dated September 1989**

### ***Issue #1***

Petitioners quoted an INPO finding that monitoring of plant activities, programs, and supervisors is often ineffective in identifying needed improvements. As an example, Petitioners cited the INPO finding that senior station managers were unaware that Instrumentation and Controls (I&C) technicians routinely used vendor manuals to troubleshoot and repair equipment, although the manuals are not approved by the Site Operations Review Committee and no program exists to keep the manuals updated.

In its Response to the INPO findings, the Licensee took several corrective actions. The Station Management Manual was revised to clearly state expected management oversight in the workplace which included a requirement for supervisors to submit a monthly summary of oversight activities performed to the Station Manager. The Licensee also upgraded guidance for supervisory walkdowns. In addition, the Licensee, with guidance from INPO, improved the existing plant administrative procedures governing the use of vendor manuals in the performance of maintenance activities.

The Staff has reviewed and evaluated the Licensee's actions in response to the INPO findings. Providing clarification and guidance with regard to supervisory oversight responsibilities in the workplace should improve management oversight effectiveness. The Staff considers the strengthening of administrative controls governing the use of vendor manuals as a proper and effective corrective action. The Staff considers the Licensee's corrective actions to be appropriate and responsive to the INPO findings.

The Staff, through its inspection activities, routinely observes and comments on management monitoring of plant activities and programs. Although the specific issue regarding technician use of unapproved vendor manuals has not been previously documented by the Staff, references to the effectiveness of Seabrook management in monitoring of plant activities are typically summarized in the Systematic Assessment of Licensee Performance (SALP) Reports. Specific references to management oversight of maintenance activities can be found in SALP Reports IR 50-443/86-99 and IR 50-443/87-99. In IR 50-443/87-99, the Staff indicated that, overall, the effective performance of maintenance activities had resulted in a high level of plant equipment operability. In addition, the Staff stated that the maintenance program had excellent controls in place which effectively tracked and managed the workload. The Staff's findings in the area of

management oversight and the performance of maintenance activities indicated acceptable Licensee performance.

Based on the NRC inspections conducted in the areas of management oversight and maintenance at Seabrook and the Staff's assessment of the Licensee's corrective actions in response to the INPO findings, the Staff has concluded that the issues raised by INPO have been satisfactorily addressed by the Licensee and do not present a significant health or safety issue.

#### *Issue #2*

Petitioners quoted an INPO finding that the Seabrook Station had experienced recurrent events due to inadequate identification and investigation of in-house operational events. Petitioners cited one of six INPO examples: recurrent events involving the inadvertent draining of the refueling water storage tank (RWST) and the condensate storage tank (CST). The Petitioners further noted the significance of the events in that the RWST and CST provide water to safety systems needed in the event of an accident.

The Licensee responded to this INPO finding through several programmatic enhancements to improve its investigation of in-house operational events. The Licensee indicated in its response that the Operating Experience Review Program would be revised to incorporate industry experience and improve distribution of Station Information Reports (SIRs). SIRs are used to document the investigation and evaluation of significant operating events. Other enhancements included the initiation of a program that would examine operational events of a lower threshold than those that would be examined by an SIR. The Licensee also implemented a Human Performance Evaluation System (HPES) program to review events from a human performance standpoint.

The Staff has reviewed and evaluated the Licensee's actions in response to the INPO findings. The programmatic enhancements and improvements initiated should increase the Licensee's ability to investigate and evaluate significant events and learn from industry experience. Initiation of a program that would capture events of a lower threshold for examination is a significant improvement which could provide operations personnel with valuable information on activities that are potential precursors to events. The Staff also considers the implementation of an HPES program an important action for the analysis of human performance. The Staff considers the Licensee's corrective actions appropriate and responsive to the INPO findings.

In addition, the Staff has closely evaluated and reviewed the Licensee's identification and investigation of certain in-house operational events. For example, the Staff reviewed the Licensee's corrective actions in response to the inadvertent draining of the RWST and CST in IRs 50-443/88-15 and 89-03. The Staff determined that the corrective actions taken were adequate and appropriate

considering the significance of the events. The Staff also routinely reviews the Licensee's application of industry experience to prevent similar occurrences at Seabrook. The Licensee's review of NRC Information Notices, which provide industry experience to nuclear utilities without requiring a specific licensee response, are discussed in IRs 50-443/87-24 and 88-11. The Staff concluded in IR 50-443/88-11 that the Licensee's engineering group was satisfactorily responding to operational issues that might impact plant operations at Seabrook.

Based on the NRC inspections and the Licensee's corrective actions in response to the INPO findings, the Staff has concluded that the issues raised by INPO have been satisfactorily addressed by the Licensee and do not present a significant health or safety issue.

### *Issue #3*

Petitioners quoted an INPO finding that improved application of industry operating experience, specifically INPO significant operating event reports (SOERs) and significant event reports (SERs), could have prevented some events that occurred at the Station. Implementation of corrective actions to prevent occurrence of events described in SOERs was frequently found not to be effective or timely. In addition, INPO found that some SERs were not reviewed completely or timely.

In its Response to the INPO findings, the Licensee indicated that it had revised its Operating Experience Review Program with goals to review and implement recommendations from specifically designated SOERs within 90 days of receipt and other SOERs and SERs within 120 days. In addition, the Licensee indicated that all SOER recommendations and SER suggestions have been reviewed and corrective action plans and schedules have been determined for all open SOER recommendations and SER suggestions.

The Staff has reviewed and evaluated the Licensee's actions in response to the INPO findings. The Licensee's action to review and schedule any resulting corrective actions with regard to the outstanding SOERs and SERs should bring its program up to date. The revision of the Operating Experience Review Program will then provide the mechanism necessary to keep the program current with industry experience. The Staff considers the Licensee's corrective actions to be an appropriate response to the INPO findings.

The Staff does not typically review a licensee's actions with regard to INPO SOERs and SERs. The Staff considers INPO SOERs and SERs to be useful industry tools providing information designed to help licensees enhance their plant operations. The Staff utilizes its own system of Bulletins and Generic Letters to alert licensees to safety-significant issues. As noted above, the Licensee's action in this area have been acceptable.



Based on the Staff's assessment of the Licensee's corrective actions in response to the INPO findings, the Staff has concluded that the issues raised by INPO have been satisfactorily addressed by the Licensee and do not present a significant health or safety issue.

#### *Issue #4*

Petitioners quoted an INPO finding involving the lack of adequate design review and documentation for plant changes and failure to incorporate changes into plant drawings and procedures with the possibility that these failures could result in plant events and reportable conditions. The INPO example referred to indicated that there were sixty-four outstanding temporary modifications, with some installed more than 4 years ago. Of these, fifty-two required a design engineering decision to make the modification permanent or to cancel the modification. The Licensee had scheduled twenty-one of these items to be completed by 1990, ten items for 1991 or later, and twenty-one had no dates established.

In its Response to the INPO findings, the Licensee stated that it has committed to review the scope of the temporary modification program. Previously installed temporary modifications that have been made permanent are being reviewed to ensure that appropriate maintenance documents are accurate. Existing plant administrative configuration controls are being enhanced. The Licensee also initiated a program to minimize the use of future temporary modifications and is in the process of reducing the current backlog.

The Staff has reviewed and evaluated the Licensee's actions in response to the INPO findings. The review of previously installed temporary modifications is prudent to ensure that all controlled documents and modification checks were completed as necessary. Enhancements to the temporary modification program and administrative configuration controls, if properly implemented, should strengthen the temporary modification process as well as minimize the future use of temporary modifications. The Staff considers the Licensee's corrective actions to be appropriate and responsive to the INPO findings.

In addition, the Staff routinely reviews the Licensee's temporary modification program through the NRC inspection program. IR 50-443/87-02 documents inspector discussions with the Licensee concerning minor discrepancies on certain piping and instrumentation drawings, which the Licensee corrected. A routine review of the Licensee's Monthly Temporary Modification Report which noted no discrepancies is documented in IR 50-443/89-13. The Staff's review of the Licensee's overall temporary modification program is documented in IR 50-443/90-05. In IR 50-443/90-05, the Staff noted two violations for which no citations were issued (due to the low safety significance of the items)

involving temporary modifications, but overall found the Licensee's temporary modification program satisfactory.

Based on the NRC inspections of the Licensee's temporary modification program and the Licensee's corrective actions in response to the INPO findings, the Staff has concluded that the issues raised by INPO have been satisfactorily addressed by the Licensee and do not present a significant health or safety issue.

#### *Issue #5*

Petitioners quoted an INPO finding involving inadequate preventative maintenance measures for check valves. The Licensee's check valve monitoring program was also found to be deficient in "quantitative acceptance criteria" and insufficient testing of check valves at Seabrook which may not identify degraded internal conditions. Check valve failures cited by INPO involved several safety systems. In addition, INPO noted that test and inspection requirements had not been specified for 64 of the 220 valves listed in the check valve monitoring program. Petitioners also discussed the importance of check valves in preventing overpressurization of low-pressure systems and the possibility of a resultant interfacing systems loss-of-coolant accident.

In its Response to the INPO findings, the Licensee indicated that the check valves used at Seabrook were selected, specified, designed, procured, installed, and tested to the applicable industry codes and standards. The Licensee also indicated that it had developed design changes or work requests to address each specific check valve issue cited in the INPO report. The Licensee is currently reviewing its current check valve design and monitoring program in order to enhance the existing check valve maintenance program. This effort is scheduled to be completed by October 1990. The review follows industry guidance and includes an assessment of the appropriate preventative maintenance measures and acceptance criteria. The Licensee is also performing a design review of check valves for applicability in accordance with accepted industry guidelines.

The Staff has reviewed and evaluated the Licensee's actions in response to the INPO findings. The Staff views the Licensee's action to address each check valve issue identified in the INPO report with the appropriate design change or work request as responsive. The Licensee's efforts to upgrade its check valve design, monitoring, and maintenance programs in accordance with industry guidance should result in improved check valve reliability. The establishment of appropriate preventative maintenance measures and suitable acceptance criteria is a vital part of a comprehensive program to ensure check valve operability. The Staff considers the Licensee's corrective actions as appropriate and responsive to the INPO findings.



In addition, the Staff has routinely inspected the Licensee's actions with regard to check valve operability. The Staff has found the Licensee's programs involving check valve design and monitoring of check valve operability acceptable as documented in NUREG-0896,<sup>3</sup> Supplements 5 and 7. The Staff also found the Licensee's in-service testing program for all safety-related pumps and valves (which includes check valves) acceptable as stated in NUREG-0896, Supplement 6.

Based on the Staff's review of the areas involving check valve operability at Seabrook and the Staff's assessment of the Licensee's corrective actions in response to the INPO findings, the Staff has concluded that the issues raised by INPO have been satisfactorily addressed by the Licensee and do not present a significant health or safety issue.

#### **Issue #6**

The INPO finding quoted by Petitioners involved the use of unapproved vendor technical manuals in the performance of various maintenance activities. The finding also indicated that some of the manuals lacked sufficient information to provide sufficient technical direction for conducting maintenance.

The Licensee's Response to the INPO finding indicated that the current program and procedures for handling vendor technical information, including vendor technical manuals, has been enhanced to include applicable INPO, and other industry guidance. The program has been strengthened to include additional evaluation of vendor technical information upon receipt to determine any necessary actions. All required actions are then tracked to completion. The Licensee has also provided additional training to personnel on procedures regarding vendor information.

The Staff has reviewed and evaluated the Licensee's actions in response to the INPO findings. The Licensee's programmatic enhancements should strengthen its program for the control of vendor technical information. The Staff has recently issued Generic Letter (GL) 90-03 which describes its position on vendor interface with regard to safety-related-component vendors. In the GL, the Staff references the Vendor Equipment Technical Information Program (VETIP) described in INPO Report 84-010. The Staff has found the VETIP INPO report, which the Licensee has used to upgrade its program and procedures for handling vendor technical information, to be acceptable. Thus, the Licensee's corrective actions have been taken in accordance with the Staff's stated policy.

Based on the Staff's assessment of the Licensee's corrective actions in response to the INPO findings, the Staff has concluded that the issues raised by

<sup>3</sup>NUREG-0896, "Safety Evaluation Report Related to the Operation of Seabrook Station, Units 1 and 2," Supplement No. 5, July 1986, and Supplement No. 7, October 1987.



INPO have been satisfactorily addressed by the Licensee and do not present a significant health or safety issue.

*Issue #7*

Petitioners quoted the INPO finding involving the adequacy of the Licensee's equipment tagging and isolation procedure. Petitioners also indicated that INPO had cited three problems, some involving safety systems, where the procedures in effect were not adequate to prevent equipment damage or personnel injury.

As a result of the INPO finding, the Licensee indicated in its Response that it is revising the station tagging control procedure to include additional guidance and controls. Additional guidance includes upgrading procedures governing the proper sequence for component isolation and providing for tagging order audits on a frequency adequate to identify problems. The Licensee has indicated that, as part of these revisions, the applicable INPO guidelines and good practices are being used and the INPO findings addressed.

The Staff has reviewed and evaluated the Licensee's actions in response to the INPO findings. The strengthening of component isolation procedures can reduce the likelihood of component damage during maintenance activities. Increasing the program audit frequency should provide the Licensee with timely feedback on the effectiveness of the programmatic enhancements. These improvements, if properly implemented, should result in an improved equipment tagging and isolation program. The Staff considers the Licensee's corrective actions to be responsive and appropriate to the INPO findings.

In addition, the Staff routinely monitors the Licensee's program of equipment tagging and isolation. For example, in 1987 the Staff issued a violation to the Licensee for failure to properly implement the requirements of the equipment tagging program with respect to work performed on the service water system. In response to the Staff's concerns, the Licensee revised the tagging procedure and retrained the operators involved. The issue is discussed in IR 40-443/88-02. Since closure of this violation, Staff inspections of the Licensee's equipment tagging and isolation program, documented in IRs 50-443/89-08 and 89-13, have found no violations.

Based on the NRC inspections conducted in this area and the Staff's assessment of the Licensee's corrective actions in response to the INPO findings, the Staff has concluded that the issues raised by INPO have been satisfactorily addressed by the Licensee and do not present a significant health or safety issue.

*Issue #8*

Petitioners quoted an INPO finding involving the material condition of plant equipment and piping. The finding indicated that some plant equipment and piping was degraded due to corrosion and that many equipment deficiencies were not in the work control system. Examples included safety system components.

The Licensee indicated in its Response that it has taken several corrective actions in regard to this INPO finding concerning equipment deficiencies. These actions include upgrading the program for supervisory walkdowns, adding a deficiency tagging program to enhance routine equipment reporting, and the continuation of a 5-year plant painting program.

The Staff has reviewed and evaluated the Licensee's actions in Response to the INPO finding. The Licensee's corrective actions involving the initiation of a deficiency tagging program and the continuation of a 5-year painting program appear to be an appropriate response to the INPO findings. In addition, supervisory walkdowns are typically an effective management tool in focusing attention on a plant's material condition. The Staff considers the Licensee's corrective actions to be appropriate and responsive to the INPO findings.

The plant's material condition is routinely observed, inspected, and documented through the NRC inspection program. Routine inspections of the plant's material condition are conducted by the NRC plant resident inspectors and are documented in IRs 50-443/88-04, 88-07, 88-10, and 90-05. These inspections found the plant material condition to be satisfactory overall, and no violations were noted. In addition to the routine inspections conducted by the plant resident inspectors, NRC regional management has also conducted reviews of the plant material condition. IR 50-443/89-20 documents the review conducted by NRC regional management. Again, the Staff found no violations and concluded that the plant material condition was acceptable.

Based on the NRC inspections conducted in this area and the Staff's assessment of the Licensee's corrective actions in response to the INPO findings, the Staff has concluded that the issues raised by INPO have been satisfactorily addressed by the Licensee and that they do not present a significant health or safety issue.

**C. Issues Discussed in INPO Evaluation Dated December 26, 1989**

*Issue #1*

Petitioners quoted an INPO finding involving the needed shifting of corporate emphasis from a construction to an operations orientation. In this regard, the INPO finding indicated that the solid radioactive waste handling group required staffing and that recent maintenance training had been cancelled due to insufficient resources. The INPO report also indicated that senior plant and



corporate management were unaware of the cancellation of training and the impact on the maintenance department's readiness for power operations.

The Licensee in its Response indicated that the responsibilities of the Production organization and those NHY organizations supporting Production are defined in the NHY manual system. Senior Production Management now chairs regular meetings with appropriate station supervision and corporate supervision. The Licensee emphasized that production priorities are clearly defined and the support necessary to resolve production problems are identified and allocated.

In response to this INPO finding, the Licensee has since staffed the Radioactive Waste Handling Group and the Operations Support Group. In addition, the Licensee stated that the INPO finding regarding maintenance training has been fully addressed. Adequate resources and attention to correct maintenance training have been applied.

The Staff has reviewed and evaluated the Licensee's actions in response to the INPO findings. The Staff recognizes that these types of findings are not atypical of a plant shifting from a construction to a production orientation. The Licensee's corrective actions, if properly implemented, should help direct the organization toward a production orientation. The Staff expects the Licensee to continue concentration on staffing and training as plant operation continues. The Staff considers the Licensee's corrective actions to be appropriate and responsive to the INPO findings.

In addition, the Staff has closely monitored the Licensee's activities in its transition from a construction to an operations orientation. As indicated previously, the Staff typically uses the SALP process to comment on management performance. The last three SALP Reports, IRs 50-443/85-98, 86-99, and 87-99, document the Staff's assessment of the Licensee's shifting of emphasis from a construction to an operations orientation. The Staff has noted in these SALP Reports that the Licensee's performance reflected a continued commitment to quality as the transition from construction to operations progressed. IR 50-443/90-03 documents the Staff's inspection of the Licensee's radioactive processing and packaging program. No violations were identified and the Staff determined that the facility was ready for full-power operation.

Based on the NRC inspections conducted in this area and the Staff's assessment of the Licensee's corrective actions in response to the INPO findings, the Staff has concluded that the issues raised by INPO have been satisfactorily addressed by the Licensee and do not present a significant health or safety issue.

#### *Issue #2*

The INPO findings quoted by Petitioners involved the timeliness and adequacy of implementation of corrective actions to resolve problems identified



within the NHY organization. Examples included repetitive procedural adherence problems and check valve failures.

The Licensee indicated in its Response that it has developed a program to identify open issues and problems areas, consolidate the issues into an Integrated Readiness Document and assign a completion schedule. These issues are then reviewed by senior management and tracked until closure. Meetings between senior management and employees are held weekly to obtain feedback on issues and effectiveness of corrective actions implemented. In regard to procedural adherence problems, the Licensee completed procedure compliance training for all site personnel in December 1989. The Licensee also indicated that a design review of check valves as well as a review of preventive maintenance activities, using industry guidelines, is currently being conducted.

The Staff has reviewed and evaluated the Licensee's actions taken in response to the INPO findings. The issue involving check valves has been previously discussed herein. In regard to the repetitive nature of procedural adherence problems, compliance training for all site personnel, stressing the significance of following procedures, is generally effective at focusing personnel attention on the importance of procedural adherence. The Licensee's corrective actions, if properly implemented, should provide the basis for reduction of the instances of inadequate procedural adherence. The Staff considers the Licensee's corrective actions to be appropriate and responsive to the INPO findings.

The Staff has closely monitored the Licensee's actions with regard to procedural adherence through the NRC inspection program. This issue is of particular concern to the Staff in view of the past failure of certain Licensee managers observing a natural circulation test at Seabrook on June 22, 1989, to ensure adherence to test procedure requirements. The June 22, 1989 event is documented in IR 50-443/89-92 and discusses the failure of the operating crew to comply with an explicit procedural requirement. The event resulted in the Staff issuance of Confirmatory Action Letter (CAL) 89-11 which required the Licensee to perform a number of corrective actions with regard to procedural adherence. These actions included issuance of the Licensee's policy defining procedural adherence requirements for all activities, issuance of a memorandum to all personnel reemphasizing the requirement that all procedures be followed, and enhancement of the Seabrook Management Manual to clearly state the only conditions under which departure from approved procedures is allowed. The completion and closure of the Licensee's corrective actions is documented in IR 50-443/89-83. The Staff concluded that this Licensee had adequately addressed the issue of procedural compliance.

Based on the NRC inspections conducted in this area and the Staff's assessment of the Licensee's corrective actions in response to the INPO findings, the Staff has concluded that the issues raised by INPO have been satisfactorily addressed by the Licensee and do not present a significant health or safety issue.

### *Issue #3*

Petitioners quoted an INPO finding which indicated that corporate and station management were often not held accountable for timely completion of assigned tasks. Examples cited by INPO included past-due integrated commitment tracking items, failure to achieve 62 percent of the corporate goals for 1989, and overdue personnel annual appraisals.

The Licensee in its Response indicated that it has taken a number of corrective actions with regard to this INPO finding. A Core Values and Work Ethic Program was implemented to strengthen attention to detail, accountability, and corporate expectations regarding high-quality work with appropriate attention to commitments, cost control, and work effectiveness. The Integrated Commitment Tracking System (ICTS) was revised, implementing a new priority system, tighter controls, and closer tracking. Personnel are being held accountable for completion of INPO findings through the use of the ICTS. Accountability for completion performance appraisals has been tied to annual wage and salary actions. Accountability for established goals has been emphasized in writing to all managers. The goals program is being reviewed monthly to ensure that established goals are consistent with management priorities.

The Staff has reviewed and evaluated the Licensee's actions taken in response to the INPO findings. The ICTS should provide management with the tool it needs to accurately track outstanding commitments and to ensure accountability for the timely completion of assignments. Assigning accountability for specific goals clarifies management's priorities and should focus the organization on the issues considered important by management. Monthly review of site goals should keep middle management and the plant staff current with senior management priorities. The Licensee's corrective actions, if properly implemented, should provide the basis for improved accountability and more timely completion of assigned items. The Staff considers the Licensee's corrective actions to be appropriate and responsive to the INPO findings.

The Staff, in the course of its inspection program, has reviewed and evaluated a number of the Licensee's programs for goal accountability. The Staff discusses the Licensee's Core Values and Work Ethic Policy statement in IR 50-443/89-83 and found the statement satisfactory. SALP Report 50-443/87-99 documents the Staff's assessment that the Licensee's performance with respect to maintenance work requests relative to Station goals was also satisfactory. In addition, the Staff reviewed, as appropriate, a number of documents involving personnel actions taken by the Licensee as the result of the June 22, 1989 natural circulation test event as documented in IR 50-443/89-21. The Staff concluded that the Licensee's actions were appropriate.

Based on the NRC inspections conducted in this area and the Staff's assessment of the Licensee's corrective actions in response to the INPO findings,



the Staff has concluded that the issues raised by INPO have been satisfactorily addressed by the Licensee and do not present a significant health or safety issue.

#### *Issue #4*

Petitioners quoted an INPO finding that insufficient management attention had been given to the development and implementation of a radioactive waste handling program and that key segments of the program were not in place. INPO examples cited by Petitioners included: unclear responsibility between two Licensee departments for radioactive waste processing and shipment, incomplete reorganization and staffing of the proposed radioactive waste organization, the failure of the radioactive waste minimization committee to meet for over 2 years, and the failure to communicate plans and milestones for the temporary storage of radioactive waste prior to the availability of long-term storage.

In response to the INPO findings, the Licensee developed a comprehensive radioactive waste program with accompanying staffing requirements and implemented a training program for radioactive waste technicians. Transfer of the chairmanship of the established radwaste minimization committee was also finalized. A minimization program and final plans for temporary storage of solid low level waste have also been completed.

The Staff has reviewed and evaluated the Licensee's actions taken in response to the INPO findings. Completion and implementation of a comprehensive radioactive waste program should clarify departmental responsibilities and result in adequate staffing. Reestablishing the chairmanship of the radwaste minimization committee should result in a more active committee. The Licensee's corrective actions, if properly implemented, should result in an effective radioactive waste handling program. The Staff considers the Licensee's corrective actions to be appropriate and responsive to the INPO findings.

In its inspection program, the Staff has conducted a startup inspection to review and assess the Licensee's ability to control and quantify radioactive waste and to review management controls of the Licensee's radioactive waste programs. The inspection results are documented in IR 50-443/89-18 and IR 50-443/90-03. The Staff found the management controls in place for the radioactive waste program to be satisfactory and concluded that the Licensee's radwaste programs were ready for full-power operations.

Based on the NRC inspections conducted in the area of radwaste controls and the Staff's assessment of the Licensee's corrective actions in response to the INPO findings, the Staff has concluded that the issues raised by INPO have been satisfactorily addressed by the Licensee and that they do not present a significant health or safety issue.



#### IV. CONCLUSIONS

The NRC Staff has reviewed the allegations in the Intervenor's Petition including the congressional testimony of Messrs. Pollard and Nader, which maintained that the Seabrook Unit 1 facility was not in compliance with NRC requirements and was unsafe to operate and has found the allegations not to be substantiated. The INPO reports on which these allegations were founded do not indicate that the Seabrook facility is out of conformance with NRC requirements or that it is unsafe to operate. The Licensee's corrective actions were appropriate and responsive to the INPO findings.

The NRC Staff's assessment extended beyond the specific issues raised in the Petition and included an assessment of the overall impact of INPO findings with regard to the Seabrook facility. As noted herein, the NRC Staff has access to and has reviewed all INPO Reports that have assessed the performance of the Licensee. The reviews of all these reports, as well as those referred to above, did not reveal any substantial health and safety issues that would call into question the continued safe operation of Seabrook Unit 1.

The institution of proceedings in response to a request pursuant to section 2.206 is appropriate only when substantial health and safety issues have been raised. See *Consolidated Edison Co. of New York* (Indian Point, Units 1, 2, and 3), CLI-75-8, 2 NRC 173, 176 (1975), and *Washington Public Power Supply System* (WPPSS Nuclear Project No. 2), DD-84-7, 19 NRC 899, 923 (1984). This standard has been applied to determine whether any action in response to the Petition is warranted. For the reasons discussed above, no basis exists for taking any action in response to the Petition as no substantial health or safety issues have been raised by the Petition. Accordingly, no action pursuant to section 2.206 is being taken in this matter.

A copy of this Decision will be filed with the Secretary of the Commission for the Commission's review in accordance with 10 C.F.R. § 2.206(c).

FOR THE NUCLEAR  
REGULATORY COMMISSION

Thomas E. Murley, Director  
Office of Nuclear Reactor  
Regulation

Dated at Rockville, Maryland,  
this 31st day of August 1990.