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UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of)	
)	
THE CLEVELAND ELECTRIC)	Docket Nos. 50-440 OL
ILLUMINATING COMPANY)	50-441 OL
)	
(Perry Nuclear Power Plant,)	
Units 1 and 2))	

APPLICANTS' MOTION FOR
SUMMARY DISPOSITION OF CONTENTION B

The Cleveland Electric Illuminating Company, Duquesne Light Company, Ohio Edison Company, Pennsylvania Power Company, and The Toledo Edison Company ("Applicants") hereby move the Atomic Safety and Licensing Board ("Board"), pursuant to 10 C.F.R. § 2.749, for summary disposition in Applicants' favor of Contention B. As discussed herein, there is no genuine issue as to any fact material to Contention B, and Applicants are entitled to a decision in their favor on Contention B as a matter of law.

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This motion is supported by:

1. "Applicants' Statement of Material Facts As To Which There Is No Genuine Issue To Be Heard On Contention B";
2. "Affidavit of Daniel D. Hulbert on Contention B" ("Hulbert Affidavit");
3. "Affidavit of Gary Winters on Contention B" ("Winters Affidavit");
4. "Affidavit of Scott T. McCandless on Contention B" ("McCandless Affidavit");
5. "Affidavit of Richard R. Bowers on Contention B" ("Bowers Affidavit");
6. "Affidavit of Kevin Holtzclaw on Contention B" ("Holtzclaw Affidavit"); and
7. Section II.A of "Applicants' Motion For Summary Disposition of Issue 14" (January 14, 1985) (articulating the legal standards applicable to a motion for summary disposition).

I. PROCEDURAL BACKGROUND

Prior to the availability of offsite emergency plans for the plume exposure pathway Emergency Planning Zone ("EPZ") for the Perry Nuclear Power Plant, the Board admitted a very broad emergency planning contention, Issue 1:

Applicants' emergency evacuation plans do not demonstrate that they provide reasonable assurance that adequate protective measures can and will be taken in the event of an emergency.

See LBP-81-24, 14 N.R.C. 175, 189 (1981), as modified by LBP-81-35, 14 N.R.C. 682, 686 (1981). The Board subsequently noted that the words "State and local" should be substituted for the word "Applicants'" in the wording of the contention. See LBP-84-28, 20 N.R.C. 129, 130 n.1 (1984).

After well-developed offsite plans had been publicly available for some time, Applicants (with the support of the Staff) moved for a Board order requiring the particularization of the broad contention. The Board granted Applicants' motion, directing Intervenor to "specify in a written filing the specific inadequacies alleged to exist in the draft local and State emergency plans * * *." See LB 84-28, 20 N.R.C. at 132.

Contention B was initially advanced in "Sunflower Alliance's Particularized Objections To Proposed Emergency Plans In Support of Issue No. I" (August 20, 1984). Over the opposition of Applicants and the Staff, the Board admitted a form of that contention. As admitted by the Board,^{1/} Contention B alleges:

Evacuation route impediments have not been identified or considered; neither has evacuation of construction workers on-site nor has a low or no power operation at Perry during extreme conditions of inclement weather been included in the plans.

"Memorandum and Order (Admissibility of Contentions on Emergency Plans and Motion To Dismiss)" (January 10, 1985), at 6.

As the Board has noted, discovery on emergency planning issues in this proceeding has been completed. See January 10, 1985 Memorandum and Order, at 5. Further, the schedule

^{1/} The Board expressly rejected all allegations of the proposed contention which are not included in the contention as framed by the Board. See January 10, 1985 Memorandum and Order, at 5.

proposed by Applicants establishes February 5, 1985 as the last day for filing summary disposition motions. See January 18, 1985 Letter, Counsel for Applicants to Licensing Board; Conference Call between the Board and the parties, February 1, 1985. Accordingly, the instant motion is timely, and Contention B is ripe for summary disposition.

II. GOVERNING LEGAL STANDARDS

A. Summary Disposition

Section II.A of "Applicants' Motion For Summary Disposition of Issue 14" (January 14, 1985) sets forth the legal standards applicable to a motion for summary disposition. The discussion there is fully applicable to this Motion and is incorporated by reference herein.

B. Substantive Law

The Commission's emergency planning regulations, at 10 C.F.R. § 50.47(b)(10), require, in relevant part, that:

[a] range of protective actions have been developed for the plume exposure pathway EPZ for * * * the public.

The standards embodied in the emergency planning regulations are further addressed by NUREG-0654/FEMA-REP-1, "Criteria For Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness In Support of Nuclear Power Plants" (Rev. 1, November 1980). NUREG-0654 Criterion J.10.k provides that offsite plans shall include:

k. Identification of and means for dealing with potential impediments (e.g., seasonal impassability of roads) to use of evacuation routes, and contingency measures.

In addition, NUREG-0654 Criterion J.4 specifies that onsite emergency plans shall provide for:

* * * the evacuation of onsite non-essential personnel in the event of a Site or General Emergency
* * *

III. ARGUMENT

Applying the Commission's summary disposition standards to the facts of this case, it is clear that the instant motion for summary disposition of Contention B should be granted.

A. Evacuation Route Impediments

Sunflower's assertion that "[e]vacuation route impediments have not been identified or considered" is -- quite simply -- wrong. To the contrary, potential evacuation route impediments (such as snow and disabled vehicles) have been identified and considered and, as indicated in the plans and procedures, resources such as tow trucks and snowplows are utilized to keep evacuation routes clear. Winters Affidavit, ¶ 2. In addition, the evacuation time estimate study includes an appendix devoted specifically to consideration of route impediments such as traffic accidents and disabled vehicles. McCandless Affidavit, ¶ 4.

The evacuation time estimate study also specifically considered the effects of a snowstorm on evacuation. McCandless Affidavit, ¶ 3. The jurisdictions within the EPZ are particularly well prepared to handle snow -- the only example of a route impediment cited in "Sunflower Alliance's Particularized Objections to Proposed Emergency Plans in Support of Issue No. I" (August 20, 1984), at 3. Because the agencies charged with responsibility for snow removal within the EPZ are equipped and staffed to keep the roads passable in a normal "snowbelt" snowfall, normal snow conditions require no special consideration in emergency planning for the Perry EPZ. Winters Affidavit, ¶ 3.

Further, most of the road departments within the plume EPZ could keep roads passable with no assistance even during a blizzard. And, in the unlikely event of an emergency at Perry during a blizzard, the resources of all road departments throughout Lake, Ashtabula, and Geauga Counties would be made available to augment the resources of any road departments within the plume EPZ which might need assistance in keeping roads passable.^{2/} With the assistance of these road departments from outside the EPZ, the few road departments within the EPZ which may need assistance will have sufficient

^{2/} Indeed, under particularly inclement weather conditions (i.e., snow accompanied by high winds), only the downwind sector of the EPZ is likely to be affected by an emergency at Perry. Therefore, should evacuation be indicated in such conditions, the snow removal resources of the three counties could be concentrated on the sector of the EPZ to be evacuated. Winters Affidavit, ¶ 4, n.5.

snow removal resources to keep the roads clear in a blizzard. Winters Affidavit, ¶ 4. Even a partial survey of road departments within the three counties reveals an impressive inventory of snow removal equipment; and additional snow removal equipment is available locally from other road departments in the three county area which were not surveyed. Winters Affidavit, ¶ 5. Still more snow removal equipment (if needed) would be provided from outside the three counties, through the Ohio Department of Transportation. Winters Affidavit, ¶ 6. For all these reasons, the first part of Contention B lacks merit.

B. Construction Workers

The second part of Contention B claims that the emergency plans do not include the evacuation of construction workers on-site. This claim is simply incorrect. As set forth in the Hulbert Affidavit, the Perry Emergency Plan and implementing procedures explicitly provide for the evacuation of all personnel without emergency response functions, such as construction workers on-site, and even describes the evacuation routes to be used. Hulbert Affidavit, ¶ 2. These personnel would be evacuated on a Site Area Emergency. Id. In addition, the evacuation time estimate study prepared for the Perry plume exposure pathway EPZ explicitly considers the evacuation of on-site construction workers. McCandless Affidavit, ¶ 5. Thus, Sunflower is wrong in asserting that the evacuation of on-site construction workers has not been considered.

C. Low Power/No Power Operation

The final aspect of Contention B argues that the emergency plans are inadequate because they do not include "low or no power operation at Perry during extreme conditions of inclement weather."

Although Sunflower did not elaborate on its contention, the logic implicit in this argument appears to be that because

- (1) evacuation is the only appropriate protective action should there be an accident at Perry with significant off-site consequences; and because
- (2) evacuation would be impossible during extreme conditions of inclement weather; therefore
- (3) Perry should be limited to low power or no power operation during such weather conditions so that an accident requiring evacuation does not occur.

None of these three subarguments are supportable, as shown by the Bowers, Winters, and Holtzclaw Affidavits.

The first subargument is that evacuation is the only acceptable protective action (and therefore if evacuation is impossible because of immobilizing weather, low or no power operation should be mandated). Commission regulation and regulatory guidance demonstrates that there is "a range of protective actions"; evacuation is not the only permissible step. 10 C.F.R. § 50.47(b)(10); NUREG-0654, at 59; Bower Affidavit, ¶ 4. Sheltering is an acceptable protective action as recognized by NRC, FEMA and EPA. NUREG-0654 at 9, 20, 1-12, 1016; EPA 520/1-78-001 Pt. II at 53; Bowers Affidavit, ¶ 5.^{3/}

^{3/} See also Consumers Power Co. (Big Rock Point Plant), LBP-84-32, 20 N.R.C. 601, 691 (1984) (sheltering is

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EPA guidance indicates that sheltering would be recommended where (1) the projected dose exceeds the Protective Action Guides by more than a few fold and timely evacuation is not feasible, or (2) where the projected dose does not exceed the PAG by more than a few fold. Sheltering in the average home reduces whole body dose by a factor of 2.5 to 3 and radioiodine and particulate dose by factors of 4 to 70 (depending on air change rates). Bowers Affidavit, ¶ 7. Respiratory protection would further reduce doses. Id., ¶ 8. Furthermore, the meteorological conditions which would accompany the inclement weather conditions postulated by Sunflower would in themselves sharply reduce the doses to the public, because of the substantial dispersion. Id., ¶ 3.

The second of Sunflower's subarguments is similarly unsupportable. The kinds of winter storm conditions that Sunflower might consider to be an "immobilizing period of inclement weather" are very unusual in the EPZ area. Based on a study of 29 years of data, the frequency of a 12-inch snowstorm is about 0.20 mean days per season. Winters Affidavit, ¶ 7. Adding the high winds which would accompany a blizzard would make the frequency even smaller. Id. Even

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appropriate protective action where evacuation is impractical or cannot be timely implemented, such as adverse weather conditions). Southern California Edison Co. (San Onofre Nuclear Generating Station, Units 2 and 3), LBP-82-39, 15 N.R.C. 1163, 1184 (1982) (sheltering is preferable when there is inadequate lead time due to severe weather conditions).

under "worst case" blizzard conditions, the counties could keep the evacuation routes open by focusing the resources within the three counties on the EPZ evacuation routes. Id., ¶ 8.

Although there have been examples of particular blizzards which left some roads impassable for a few days, in those few cases there was no attempt to marshal available resources to clear a particular area. Id., ¶ 9. In any event, there is no requirement that evacuation be feasible under all foreseeable circumstances. Consumers Power Co. (Big Rock Point Plant), supra, at 691.

The final part of Sunflower's argument is the unsupported assumption that the risk of an accident would be reduced if the plant were required to go to low power or no power operation during extreme conditions of inclement weather. This assumption is rebutted by the Holtzclaw Affidavit.

The likelihood of an accident with the potential for core damage and fission product release is essentially the same, regardless of whether the reactor is at full power, low power or no power within the first day following full power operation. Holtzclaw Affidavit, ¶ 4. This is because the ability of water delivery systems to supply adequate core cooling is not affected by low or no power operation. Id. The accident sequences with the potential for core damage require multiple failures which are unrelated to full, low or no power operation. Id. Therefore, the likelihood of accident progression is not reduced by a decrease in reactor power. Id., ¶ 5.

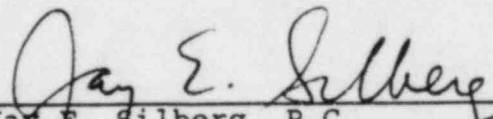
The consequences of the highly improbable accident causing a significant offsite release of radiation are negligibly different whether the plant is at full, low or no power operation during a period of inclement weather. Id., ¶ 6. At low power operation, there is essentially no change in fission product inventory. Id. At no power, there is little appreciable change for many hours. Id. and attached graph. In sum, the fission product inventory in the core is relatively insensitive to the time after shutdown.

Taking all three subparts of this aspect of the contention, it is clear that a low/no power requirement is not justified. First, sheltering can be an effective protective action. Secondly, it is unlikely that even a blizzard will substantially delay evacuation should that be appropriate. And third, low power or no power operation when the postulated extreme weather conditions occur would not significantly reduce either the probability or the consequences of an accident with significant off-site doses.

IV. CONCLUSION

Because there is no genuine issue of material fact to be heard on the issues of evacuation route impediments, the evacuation of construction workers, or low power/no power operation, Applicants' Motion For Summary Disposition of Contention B should be granted.

Respectfully submitted,


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