

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of)	
CONSUMERS POWER COMPANY)	Docket No. 50-155-OLA
(Big Rock Point Nuclear Power)	(Spent Fuel Pool
Plant))	Modification)

CONSUMERS POWER COMPANY'S PROPOSED OPINION
ON THE ADMINISTRATIVE CONTROLS CONTENTION
(O'NEILL II G (a)) AND CERTAIN EMERGENCY
PLANNING SUBCONTENTIONS (CHRISTA-MARIA 9(4),
9(5), 9(7), AND PART OF 9(2))

I. BACKGROUND

Consumers Power Company ("Licensee") submitted an application for an amendment to its operating license for the Big Rock Point Plant in April, 1979. The proposed license amendment would increase the storage limit with spent fuel assemblies in the spent fuel pool at Big Rock Point from 193 to 441 assemblies.

Pursuant to a notice concerning the proposed amendment, which was published in the Federal Register by the U.S. Nuclear Regulatory Commission on July 23, 1979, several petitions to intervene were filed. Following a prehearing conference, the petitions of Mr. John O'Neill, and Ms. Christa-Maria, Mr. Jim Mills and Mrs. Joanne Bier (the latter three individuals were consolidated as one party) were granted by the Atomic Safety and Licensing Board

("Licensing Board") by its order of January 17, 1980. That order also admitted several contentions raised by these parties as issues in controversy with respect to Licensee's license amendment application to expand the use of the Big Rock Point spent fuel pool.

Evidentiary hearings were held on June 7 through June 12, 1982 in Boyne Falls, Michigan. The hearings are presently recessed. However, several issues were concluded and the Licensing Board is prepared to issue, from time to time, partial initial decisions on these matters. This partial initial decision is limited to certain subcontentions concerning Christa-Maria Contention 9--emergency planning-- and O'Neill Contention II.G.(a)--cask handling administrative controls. Licensee's Findings of Fact and Conclusions of Law on these contentions submitted simultaneously with this Opinion are incorporated by reference herein.

II. EMERGENCY PLANNING MATTERS

Christa-Maria Contention 9 consists of several subcontentions. The allegations in the second sentence of subcontention 9(2), and subcontentions 9(4), 9(5), and 9(7) are decided here. Subcontentions 9(3) and the first sentence of subcontention 9(2) were decided in a previous order of the Licensing Board. Subcontentions 9(1), 9(6), 9(8) and 9(9) will be the subject of future evidentiary proceedings.

The emergency planning concept embodied in 10 C.F.R. §50.47 and Appendix F thereto is based on a division

of responsibility among the Licensee and State and local governmental units. Each party must have a clear understanding of its role and the sharing of the emergency planning responsibility demands the cooperation of all concerned. (NUREG-0654, "Criteria for Preparation and Evaluation of the Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants," p. 23). The Licensing Board must be guided by these principles in its consideration of subcontentions 9(4), 9(5), 9(7) and the second sentence of 9(2).

(1) Subcontention 9(2)

The pertinent portion of this subcontention states:

In addition, the public, local officials, and school officials should be more completely educated in problems of radiation exposure.

The State of Michigan has assumed a significant responsibility for training local officials in their respective emergency planning duties. The State's Emergency Plan provides comprehensive direction to State and local officials with respect to the policy and nature of radiological emergency training. (Licensing Board Finding No. 4; Axtell Testimony, p. 4 and Attachment 1). The Federal Emergency Management Agency ("FEMA"), the federal agency having oversight responsibility for State and local emergency planning matters, has determined that local governmental and school officials are trained in radiological matters through various activities

sponsored by the State and Licensee. (Licensing Board Finding No. 4; Bement Testimony, p. 4). This determination was largely uncontroverted. Intervenors did not present any evidence or in any way show that local and State officials lacked an understanding of or training with respect to radiological matters in the discharge of their duties under State or local emergency plans. In this circumstance, FEMA's determination is conclusive and binding on this Licensing Board. (10 C.F.R. §50.47(a)(2)).

Guidelines published by the NRC Staff recommend that nuclear power reactor licensees provide training to individuals, such as local and public officials, who may be called upon to provide assistance in the event of an emergency. (NUREG-0654, pp. 75-77). Licensee trains State and local officials in radiological emergency response activities. (Licensing Board Finding No. 6; Axtell Testimony, p. 5). Training in radiological matters is regularly included in the training of the staff's hospital emergency rooms, ambulance crews and fire departments. In some instances these training activities have been ongoing for at least the past 14 years. (Licensing Board Finding No. 7; Tr. 1109-10). In addition, the Licensee participates in training courses conducted by the State for local officials; and finally, local officials, as well as members of the public, augment their knowledge by taking tours of the Big Rock Point Plant or by attending lectures conducted by plant personnel. (Licensing Board Findings Nos. 8 and 9; Axtell Testimony, pp. 5, 6-7).

Based on the record, the Licensing Board concludes that the State of Michigan and the Licensee provide adequate programs to train local and school officials in radiological emergency response activities. Our previous findings on the public information pamphlet considered the adequacy of the radiation information in the pamphlet. We found that the new public information pamphlet proposed for distribution by the Licensee sets forth an adequate discussion of radiation hazards and therefore, will provide adequate education for the public in the hazards of radiation exposure upon its distribution.

(2) Subcontention 9(4)

This subcontention states:

Applicant should be required to assist persons without vehicles to leave the area during an emergency evacuation.

The evacuation of off-site persons is the responsibility of State and local officials, and in particular, the Sheriff of Charlevoix County. (Licensing Board Findings Nos. 11 and 12). The Sheriff and the Emergency Services Coordinators also provide evacuation assistance to persons without vehicles. Such persons are advised to make advance arrangements with these organizations. The new public information pamphlet will contain a special needs form that can be used to request transportation assistance. Moreover, the present pamphlet advises persons without transportation either to ride with a neighbor or to listen to radio or

television announcements for the location of and phone numbers of transportation services established during emergency situations. (Licensing Board Finding No. 13; Bement Testimony, p. 7).

FEMA has determined that adequate planning exists to assist persons without vehicles during an emergency evacuation. (Licensing Board Finding No. 14; Bement Testimony, p. 5). Neither FEMA nor State and local officials believe it is necessary for the Licensee to establish a program, as suggested by Intervenors, to provide assistance to persons without vehicles. FEMA has determined that the planning of State and local officials in this regard is sufficient. Indeed, the responsibilities of the Licensee and local officials are well coordinated, i.e., the Licensee alerts persons in need of transportation where to seek assistance and then the assistance is provided by such local units as the Charlevoix Sheriff's Department. FEMA's determination is uncontroverted, and accordingly, it is conclusive and binding on the Licensing Board. (10 C.F.R. §50.47(a)(2)). Hence, subcontention 9(4) is rejected as not being supported by the evidence.

(3) Subcontention 9(5)

This subcontention states:

- (5) A current list of invalids should be kept so that they can be assisted in time of emergency.

This subcontention questions whether or not the list of invalids living in the five mile plume exposure pathway is

current. Obviously, the whereabouts of such persons should be known so that they can be assisted and provided transportation should evacuation be necessary.

A list of invalids who may need assistance in time of emergency is maintained by the Charlevoix County Sheriff with the assistance of Emergency Service Directors of Charlevoix and Emmet Counties, and the Adult Services Worker for the Emmet County Department of Social Services. (Licensing Board Findings Nos. 14 and 15; Bement Testimony, p. 7; Tr. 963-4, 1979). The list contains the names and addresses of 40 invalids who reside in Charlevoix County within the 5 mile plume exposure pathway. (Licensing Board Finding No. 16; Tr. 1478).

The names on the Sheriff's list were compiled as a result of a news release which was distributed in the Charlevoix/Petosky area during April 1980. (Licensing Board Finding No. 17; Tr. 834-35, 981). The news release sought information concerning identity of invalids who might need assistance during an emergency. This search was subsequently augmented by local officials of Emmet and Charlevoix Counties who also sought to identify persons needing assistance who might not have responded to the news release.

FEMA has concluded that the Sheriff's list of invalids is current (Licensing Board Finding No. 16; Bement Testimony, pp. 6-7, Tr. 962-64), and that conclusion has not been controverted by Intervenors. Accordingly, the Licensing Board finds FEMA's determination conclusive, and subcontention 9(5) is rejected.

(4) Subcontention 9(7)

This subcontention states:

Applicant's emergency plan should be revised so that it relies only on people who exist and have been properly identified and so that there will be adequate coordination among responsible personnel.

NRC regulations require that licensees' emergency plans provide for adequate staffing and that coordination among responsible personnel be effectively implemented. (10 C.F.R. §50.47(2)). Licensee's emergency plan for the Big Rock Point Plant does provide for adequate staffing as well as effective coordination. Mr. Axtell, Licensee's Emergency Planning Coordinator, testified that all positions identified in the emergency plan are filled and that these individuals have been trained in their respective emergency functions. (Licensing Board Finding No. 20; Axtell Testimony, p. 11 and Attachment 4). This personnel roster is reviewed every three months to assure that it is current and complete. (Licensing Board Finding No. 21; Axtell Testimony, pp. 11-12).

The Charlevoix and Emmet County emergency plans likewise provide adequate staffing. The performance of the counties' respective staffs were tested and evaluated during an annual exercise conducted on April 6, 1982. FEMA concluded that the staffs of Charlevoix and Emmet counties were generally adequate. The only exception involves a question as to whether it is necessary to have a second shift for certain county personnel. The Emergency Services Coordinator for Charlevoix County, who was identified by FEMA as requiring

additional staffing support, disagrees with this assessment. Nevertheless, FEMA has concluded that adequate staffing and coordination exist. (Licensing Board Finding No. 22; Bement Testimony, p. 8).

This contention was not seriously contested by Intervenors in either direct testimony or by cross-examination. The Licensing Board concludes that Licensee's emergency plan meets the requirements of NRC regulations with respect to adequate staffing and coordination; and that FEMA's similar determination with respect to Emmet and Charlevoix counties is conclusive. Subcontention 9(7) is rejected.

III. ADMINISTRATIVE CONTROLS

O'Neill contention II G(a) states:

Administrative controls proposed to prevent a cask drop over the pool are inadequate. These are mentioned on pages [sic] 4-9 of the application. Administrative controls have proved inadequate in the past in preventing incidents and are frequently violated at the plant.

The NRC's requirements concerning "administrative controls" are established in 10 C.F.R. §50.36 which decrees, among other things, that each operating license "will include technical specifications . . . [to] be derived from the analyses and evaluation included in the safety analysis report, and amendments thereto."^{1/} See also 10 C.F.R. Part 50

^{1/} The NRC is presently considering proposed amendments to 10 C.F.R. §50.36 entitled "Technical Specifications for Nuclear Power Plants," 47 Fed. Reg. 13369 (March 30, 1982). The purpose of the proposed changes is to reduce the volume of Technical Specifications and to recognize the different levels of importance associated with various plant functions.

Appendix B, Criterion V. The term "administrative controls" is defined extremely broadly in 10 C.F.R. §50.36(c)(5):

Administrative controls are the provisions relating to organizations and management, procedures, recordkeeping, review and audit, and reporting necessary to assure operation of the facility in a safe manner.

The specific administrative controls challenged in O'Neill contention II G(a) are those proposed by Licensee on page 4-9 of its Application, which provides in pertinent part:

Administrative controls will be established for casks other than the fuel transfer cask to ensure that: (1) no cask is moved over stored spent fuel, (2) all cask handling operations are limited to the southwest corner of the spent fuel pool, and (3) no spent fuel is stored in the two existing "A" racks adjacent to the cask handling area during cask handling operations. These controls will preclude the dropping or tipping of a cask onto a fuel rack with stored fuel.

Thus, O'Neill contention II G(a) raises two issues. First, the contention alleges that controls specified on page 4-9 of the Application are inadequate to prevent a cask drop and, second, the contention broadly alleges that Licensee has historically been incapable of effectively implementing any administrative controls at the plant. We shall address the two challenges separately.

The purpose of the cask handling administrative controls is to prevent damage to fuel stored in the spent fuel pool. The controls are not designed to prevent a cask drop but rather achieve their intended purpose by mitigating the consequences of a cask drop through designation of safe load paths and restriction of fuel storage areas.

The controls apply to the handling of all casks in the spent fuel pool except for the fuel transfer cask.^{2/}

David Blanchard, a Technical Engineer at the Big Rock Point Plant, testified that he was partly responsible for the development of the administrative controls procedures used during operations involving the handling of casks. He stated that cask handling operations in the spent fuel pool are restricted by specific procedures to the southwest area of the pool, an area that has been designated as the cask handling area. Currently, no fuel storage racks are located in the vicinity of the cask handling area. Upon expansion of the spent fuel storage in the pool, two racks will be relocated in the vicinity of the cask handling area. Mr. Blanchard testified that after the racks are relocated, the existing cask handling procedures will be modified to prevent casks from being placed in the pool unless the two racks have been verified to be empty. (Licensing Board Finding No. 31; Blanchard Testimony, pp. 8-9).

In addition, Mr. Blanchard explained other administrative controls which are specifically designed to prevent a cask drop. These additional controls include periodic inspection, preventive maintenance, and function testing to assure all controls, and load bearing and safety devices are in satisfactory working order. (Licensing Board Finding No.

^{2/} The 24-ton fuel cask does not require the administrative controls listed on page 49 of the Application because it is equipped with safety slings which prevent the cask from dropping. The reliability of the safety slings is the subject of O'Neill Contention II C which will be considered separately.

33; Blanchard Testimony, p. 9). In the opinion of Mr. Blanchard, the administrative controls for handling of casks in the spent fuel pool are adequate to preclude fuel damage during such operations. Mr. Richard L. Emch, NRC Project Manager for the Big Rock Point Plant concurred with Mr. Blanchard's opinion.^{3/} (Licensing Board Finding No. 51; Paulson Testimony, p. 4, as adopted by Mr. Emch, Tr. 2594-95).

O'Neill Contention II G(a) also alleges that administrative controls at the Big Rock Point Plant have proven inadequate in the past and are frequently violated. This allegation was rebutted by Mr. Edmund W. Raciborski, Quality Assurance Superintendent at the Big Rock Point Plant, and Mr. Patrick M. Donnelly, Shift Supervisor at the plant. Their testimony showed that violations of administrative controls do not frequently occur.

The Big Rock Point Plant has an excellent record of almost 20 years of operation. Specifically in regard to the handling of casks, Mr. Blanchard testified that there has never been a cask drop at the Big Rock Point Plant. (Licensing Board Finding No. 34, Blanchard Testimony, p. 10). Mr. Donnelly pointed out that two of the administrative controls considered here have already been in effect since 1974 and have never been violated. (Licensing Board Finding No. 44; Donnelly Testimony, p. 13). Mr. Donnelly further highlighted the excellent operating record of the Big Rock

^{3/} Mr. Emch adopted the written testimony of the former project manager, Walter A. Paulson, who did not appear as a witness. (Licensing Board Finding No. 22, fn. 19; Tr. 2594-2595).

Point Plant: only one release in excess of Appendix A to 10 C.F.R. Part 20, only three incidents of occupational exposure in excess of Federal limits, no "lost time" injuries in the last four years, and currently the plant holds the world record for continuous operation of a boiling water reactor. (Licensing Board Finding No. 45, Donnelly Testimony, pp. 4-5).

Violations of administrative controls have occurred in the history of the Big Rock Point Plant but not with the frequency suggested by the contention. Administrative controls violations have been monitored by a comprehensive reporting and corrective action system described by Mr. Raciborski. (Licensing Board Finding Nos. 38-40; Raciborski Testimony, pp. 4-10). A review of this reporting system by Mr. Raciborski revealed only 23 administrative control violations specifically associated with or around the fuel pool or reactor building crane in 19 years of operation.^{4/} The corrective action system has been used effectively to correct the deficiencies discovered by these violations.^{5/} (Licensing Board Finding No. 42, Raciborski Testimony, pp. 10-11). Corrective action takes the form necessary to cure the deficiency sometimes calls for training of personnel to

^{4/} Though some violations were potentially serious, some were minor violations such as failure to sign-off on a written procedure. (Licensing Board Finding No. 41; Raciborski Testimony, pp. 10-11).

^{5/} One incident which occurred on September 1, 1981 involving the movement of fuel assemblies without proper procedure is still undergoing resolution by the corrective action system. (Licensing Board Finding No. 43; Raciborski Testimony, pp. 10-11; Donnelly Testimony, pp. 8-12).

conform to new administrative controls. Those personnel who cannot conform to procedures are moved to different positions where they will not affect plant operation. (Licensing Board Findings No. 48; Tr. 2589-2590). A recent audit by the Institute of Nuclear Operation ("INPO") commended Licensee's corrective action system for its extensive follow-up activities. (Licensing Board Finding No. 50; Tr. 2591).

Intervenors did not present any evidence nor make any showing through cross-examination suggesting that the proposed administrative cask handling administrative controls will be inadequate to achieve their intended purpose nor that Licensee cannot implement the procedures. We find that the proposed administrative controls are adequate to minimize the risk of damage to spent fuel in the spent fuel pool and Licensee will be able to implement them effectively.

IV. CONCLUSION

Based on the weight of the evidence, the Licensing Board finds that Christa-Maria Emergency Planning Subcontentions 9(4), 9(5), 9(7) and that part of 9(2) considered in this opinion and O'Neill Contention II G(a) regarding administrative controls do not raise matters posing a significant public health and safety concern and therefore are without merit.

Respectfully submitted,

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DATED: July 30, 1982