

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

Before the Atomic Safety and Licensing Board

5/12/78

In the Matter of)	
)	
PUBLIC SERVICE ELECTRIC & GAS COMPANY)	Docket No. 50-272
)	Proposed Issuance
)	of Amendment to
(Salem Nuclear Generating Station, Unit No. 1))	Facility Operating License No. DPR-70

LICENSEE'S ANSWER TO THE AMENDED
PETITION TO INTERVENE OF ALFRED
AND ELEANOR COLEMAN

INTRODUCTION

By its "Memorandum and Order" dated April 26, 1978, the Atomic Safety and Licensing Board ("Licensing Board" or "Board") rejected a petition for leave to intervene regarding a modification to the spent fuel storage pool of the Public Service Electric and Gas Company's ("Licensee's") Salem Nuclear Generating Station, Unit 1 ("facility," "unit" or Salem Unit 1") filed by Alfred C. Coleman, Jr. and Eleanor G. Coleman ("the Colemans" or "Petitioners"). However, the Board gave the Colemans an additional ten days to cure the defects in their petition. ^{1/}

On Friday afternoon, May 12, 1978, counsel for the Licensee received a copy of an "Amended Petition to Intervene" ("Amended Petition") filed on behalf of the Colemans by the Department

^{1/} On March 10, 1978 the Office of the Public Advocate had requested and was granted an extension of time to file petitions for leave to intervene in the captioned matter. After the Colemans' original petition was filed on March 11, 1978, a second petition was filed by the Colemans approximately two weeks later.

of the Public Advocate of the State of New Jersey. ^{2/}

For the reasons discussed below, the Amended Petition fails to cure the deficiencies which the Board recognized in the Colemans' original petition and should be denied.

INTEREST

In its Memorandum and Order at p. 5, the Board found "an interest sufficient for intervention according to 10 CFR 2.714, if the facts alleged in support of the interest are placed before the Board in a proper form." The "Affidavit in Support of Amended Petition to Intervene" ("Affidavit") sets forth similar recitals as to the distance the Colemans reside from the facility. While we still submit, as described in "Licensee's Answer to Petition for Leave to Intervene of Eleanor G. Coleman and Alfred C. Coleman" ("Licensee's Answer"), dated March 27, 1978, that a sufficient interest has not been demonstrated, in view of the Board's ruling, we will only make one further observation regarding the interest element.

The Colemans' Affidavit purports to speak to not only their interest, but also "the interests of others similarly situated."^{3/} If the Colemans are now seeking to include others

^{2/} The Public Advocate had requested a two day extension of time in which to submit an amended petition.

^{3/} Affidavit at 2.

within the scope of their Petition, the NRC's rules do not permit individuals to represent others in such a capacity.^{4/}

CONTENTIONS

Licensee submits that none of the revised "contentions" submitted by the Colemans meet the requirements of 10 CFR §2.714 for consideration in this proceeding. The Colemans, with expert help, have had an opportunity to recast their contentions to eliminate the deficiencies discussed in some detail by the Board in its Memorandum and Order. As discussed herein, Petitioners have seemingly ignored the statements of the Board regarding its denial of contentions.

The Board should not admit contentions which are barren and unfocused as they are of no assistance in the resolution of the issues to be decided. See BPI v. Atomic Energy Commission 502 F.2d 424, 429 (1974). At this stage of the proceeding, there is no duty placed upon a licensing board to recast contentions offered by one of the litigants in order to make those

^{4/} Detroit Edison Company (Enrico Fermi Atomic Power Plant, Unit No. 2), ALAB-470, 7 NRC _____, n. 1 (April 26, 1978); Gulf States Utilities Company (River Bend Station, Units 1 and 2), ALAB-183, 7 AEC 222, n. 4 (1974); Long Island Lighting Company (Shoreham Nuclear Power Station), LBP-77-11, 5 NRC 481, 483-3 (1977); Allied General Nuclear Services (Barnwell Fuel Receiving and Storage Station), LBP-75-60, 2 NRC 687, 690 (1975).

contentions acceptable. ^{5/} We therefore submit that this petition should be denied.

Paragraph 1 states that the Licensee "has given inadequate consideration to protection against missiles from external sources." The Board has already recognized that such a contention is beyond the scope of the proceeding. ^{6/} As recognized by the Licensing Board, the design of the spent fuel storage building, including "the ability of the installation to withstand projectiles," has already been resolved in the proceedings on the Licensee's construction permit and operating license. ^{7/} The requested change does not involve a change to the fuel storage building.

In Paragraph 2, Petitioners allege that the Licensee "has given inadequate consideration to the occurrence of accidental criticality due to the increased density or compaction of the spent fuel assemblies." The Colemans allege that additional consideration is required due to deterioration of the Boral plates and of the rack structure and unexpected seismological events leading to the dislodging of spent fuel bundles.

With regard to the former category, Petitioners have not alleged any mechanism for deterioration of the Boral plates or the rack structure. Nor have they alleged why the proposed

^{5/} Commonwealth Edison Company (Zion Station, Units 1 and 2), ALAB-226, 8 AEC 381, 406 (1974). It must be noted that the Office of the Public Advocate is well versed in NRC requirements, having participated in at least three other proceedings. From the Public Advocate's telegram of May 10, 1978, a technical consultant was available for consultation in connection with the drafting of the present contentions.

^{6/} Memorandum and Order at 4.

^{7/} Id.

periodic inspection program will fail to disclose any such deterioration. The Board has admonished Petitioners that "[i]n view of the detailed technical data supplied by the Licensee on the design of the rack, it is incumbent upon the Petitioners to provide the Board with at least one alleged fact about the modification which might cause this risk." ^{8/} This they have not done and this "contention" must fail.

With regard to subparagraph c., the seismic design of the facility was a matter determined at the construction permit and operating license stages. The new fuel racks will utilize the same seismic design criteria; therefore this portion of the contention should not be considered.

Paragraph 3 asserts that the Licensee has "given inadequate consideration to protect against the threat of terrorism and industrial sabotage to the spent fuel housing, coolant system, and racks." ^{9/} It must again be emphasized that the "fuel housing" (the pool itself) and coolant system are unchanged. In its Memorandum and Order, at p. 4 the Licensing Board has already dismissed a similar contention regarding the possibility of sabotage on the basis that this had already been considered at the construction permit and operating license stages. ^{10/} This "contention" should be denied.

^{8/} Id. at 6

^{9/} Amended Petition at 2.

^{10/} See also "Licensee's Answer to Petitions for Leave to Intervene by the Township of Lower Alloways Creek" dated March 21, 1978 at 5-6:

Similarly, Paragraph 4 which addresses "extreme meteorological events," is beyond the scope of this proceeding and should not be considered. The design values for natural phenomena were specified at the construction permit and operating license stages. Moreover, the building surrounding the spent fuel is unchanged.

Paragraph 5 asserts that inadequate consideration has been given "to protection against gradual coolant leakage caused by metal or structural defects and deterioration." It must be borne in mind that the fuel pool is like a bathtub in which the fuel racks are contained. The requested modification does not change the bathtub or fuel pool. Therefore, the considerations relating to its general design, construction, and monitoring are unrelated to the proposed modification. This has been recognized by the Licensing Board. In its Memorandum and Order at p. 8 it states:

Footnote continued from previous page:

The question of the Licensee's compliance with the requirements of §73.55 relating to requirements for physical protection of nuclear power reactors against industrial sabotage is not at issue here. Conformance with that regulation is designed to provide sufficient security against the threat of sabotage to any part of the facility. Whether permission to store additional fuel in the pool is granted or not, the requirements with regard to preventing access to the fuel pool are the same. Because the NRC requirements regarding industrial security must and will be met, the consequences of sabotage need not be further considered. Therefore, Paragraph 6 does not represent a valid contention and its consideration would be tantamount to an attack on Commission regulations prohibited by 10 CFR §2.758.

"Contention 18 asserts that the Licensee has not considered the consequence of loss of coolant. Again, loss of coolant is a matter necessarily included in NRC's review of the Licensee's original design for the pool, so Petitioners must set forth some asserted fact about the modified design which relates to loss of coolant." [emphasis in original]

The Colemans have failed to make such a showing and this contention should be denied.

In paragraph 6, Petitioners state that there has been inadequate consideration to qualification and testing of Boral material in the environment of protracted association with spent nuclear fuel" Material considerations relating to compatibility are described beginning on p. 22 of the "Description and Safety Analysis, Spent Fuel Storage Rack Replacement, No. 1 Unit" ("Description and Safety Analysis"). A discussion of the poison verification program, including the in-pool surveillance program, is described at pp. 23-24. Petitioners give no specification as to any deficiency in this presentation. This contention should be denied.

Paragraph 7 is clearly an attempt to raise questions concerning long term storage beyond the duration of the Salem Unit 1 operating license. The Board has already excluded such a contention:

Contention 6 asserts that because there is no assurance of commercial reprocessing or a permanent off-site repository for spent fuel, this modified pool constitutes a waste repository and requires a separate license. This argument has been expressly rejected by the Atomic Safety and Licensing Board in Northern States Power Company (Prairie Island Nuclear Generating Plant, Units 1 and 2), ALAB-445,

7 NRC ____ (January 30, 1978). Contentions 8 and 19, which make assertions similar to those of Contention 6, fail for the same reason. ^{11/}

This contention should be denied. ^{12/}

Paragraph 8 alleges that the Licensee "has given inadequate consideration to the provision of periodic metallurgical testing of sample spent fuel rods. As the Licensing Board has already ruled, such subjects have been resolved by the NRC in the proceedings on the Licensee's construction permit and operating license. ^{13/}

^{11/} Memorandum and Order at 11-12. Contentions 6, 8, and 19 read as follows:

6. Petitioners contend that there is no assurance of commercial reprocessing or off-site interim or permanent repository. This increased density and/or capacity for storage in spent fuel rods assemblies, plus 3 other storage facilities in the same vicinity constitutes a waste repository and requires a separate license.
8. Petitioners contend that the applicant must demonstrate access to a "safe and final" method of storing high-level radioactive waste.
19. Approval of the subject application will not force those responsible to develop acceptable disposal nor will it force an admission there is no solution. Reprocessing is not an acceptable solution to the disposal of this high level waste.

^{12/} See also Licensee's Answer to Petition for Leave to Intervene of Eleanor G. Coleman and Alfred C. Coleman at pp. 6-7.

^{13/} Memorandum and Order at 4.

NRC has already reviewed the extent to which spent fuel can be stored in the pool for the length of time requested, the possibility of corrosion and leakage of fission products, . . . the need for surveillance . . . and the consequences of mechanical failure. 14/

Without more this "contention" is deficient and should be denied.

In Paragraph 9, it is asserted that inadequate consideration has been given to alternatives to the proposed action. In particular, this paragraph recites almost verbatim a list of the alternatives discussed in the Commission's notice "Spent Fuel Storage, Intent to Prepare Generic Environmental Impact Statement on Handling and Storage of Spent Light Water Power Reactor Fuel" (40 Fed. Reg. 42801, September 16, 1975) and it ignores any specifics related to Salem Unit 1. It also completely ignores the presentation regarding these alternatives and the rejection of each of these by the Licensee contained on pp. 1-4 of its Description and Safety Analysis. This "contention" lacks specificity and should be denied.

In Paragraph 10, it is asserted that the Licensee "has not yet evaluated the effects of a postulated dropped fuel assembly accident." This assertion is factually incorrect. This

14/ Id.

evaluation is presently on pp. 36b, 37b et seq. of the "Description and Safety Analysis." ^{15/}

In Paragraph 11, Petitioners complain about the disparity between the economic benefits of one community near the plant as opposed to another community. Petitioners are clearly in the wrong forum. Only the State of New Jersey can decide on the apportionment of taxes paid by the facility. The NRC clearly has no jurisdiction in this area. ^{16/} Petitioners' assertions regarding "economic impacts due to public apprehension" are completely speculative and without supporting basis. This assertion is not connected in any way to the request presently under review. This contention should be denied.

Paragraphs 12 and 13 relate to releases of radioactive effluents, particularly Kr-85, resulting from an increase in the amount of fuel storage. Initially, with regard to Kr-85 as discussed at p. 10 of the Description and Safety Analysis, the discharge of fuel from the reactor is expected to occur on a 1/3 core per year rate and the release of Kr-85 is most likely to occur during the initial handling and the first year of storage. Therefore, whether the fuel pool is expanded or not,

^{15/} While this disposes of this matter, we wish to note our doubt as to whether this Licensing Board could consider other than contested issues. Cf. Section 2.760a which explicitly authorizes this for operating license proceedings.

^{16/} In Northern States Power Company (Tyrone Energy Park, Unit 1), ALAB-464, 6 NRC ____, Slip op. at 5 (March 17, 1978) the Appeal Board stated that "[t]he requirements of state law are beyond our ken; such matters are for the state regulatory commission" citing Cleveland Electric Illuminating Co. (Perry Units 1 and 2), ALAB-443, 6 NRC 741-48 (1977)

the Kr-85 would be released and such releases would not be associated with the required modification; therefore, the approach of assuming an increase of 4.5 in the amount of Kr-85 released, to correspond to an increase of 4.5 in the number of fuel assemblies stored, is extremely conservative.

Even were there to be an increase to 4.5 ci of Kr-85, this increase is insignificant by comparison. This would represent an increase of less than 1.25 percent in Kr-85 released from the unit. Reference to Table S-3 of 10 CFR Part 51 reveals that radioactive releases of Kr-85 to provide a model LWR annual fuel requirements would total 400,000 curies. With regard to even these values, the Appeal Board found that there would not be room for any serious suggestion that the project be abandoned.^{17/} Even more recently, the Commission has not seen a need to reopen those proceedings, such as Salem Unit 1, for which operating licenses have been issued.^{18/} The doses of Kr-85 from the fuel pool modification are conservatively 100,000 times less than this and truly, de minimus.

Licensee sees no reason that cumulative effects have to be considered in this proceeding. The Petitioners speculate that the two Hope Creek units will, sometime in the future, request expansion of the fuel pools. There is no basis for such

^{17/} Public Service Electric and Gas Company (Salem Nuclear Generating Station, Units 1 and 2), ALAB-426, 6 NRC 206, 209 (1977).

^{18/} See Uranium Fuel Cycle Impacts from Spent Fuel Reprocessing and Radioactive Waste Management, 43 Fed. Reg. 15613 (April 14, 1978).

speculation given and therefore no reason to attempt to consider such a hypothesis.

While a request to install the same type of modified racks as for Unit 1 has been submitted for Salem Unit 2, Petitioners have shown no reason, considering even the conservatively calculated values of Kr-85, why Unit 2 must be considered along with Unit 1 where the releases are de minimus.

CONCLUSION

For the above stated reasons, the petition for leave to intervene of the Colemans should be denied.

Respectfully submitted,

CONNER, MOORE & CORBER



Mark J. Wetterhahn
Counsel for the Licensee

May 18, 1978

Of Counsel:

Richard Fryling, Jr., Esq.