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UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION
Before the Atomic Safety and Licensing Board

In the Matter of	)	Docket Nos.:
	)	50-237, 50-249, 50-254, 50-265
COMMONWEALTH EDISON COMPANY	)	
	)	Amendments to Facility
(Dresden Station, Units 2 & 3, and Quad Cities Station, Units 1 & 2))		Operating License Nos.: DPR-19, DPR-25, DPR-29, DPR-30

MEMORANDUM AND ORDER FOLLOWING SPECIAL PREHEARING CONFERENCE

Commonwealth Edison Company, the Licensee, now holds licenses to operate nuclear power reactors at the Dresden Nuclear Power Station and the Quad Cities Nuclear Power Station. For each of these Stations, it has authority to store spent fuel from each reactor at that Station in the appropriate spent fuel storage pool of that Station. In this proceeding, which is to amend its operating license, the Licensee seeks permission to receive and store at each Station spent fuel which was not generated at that Station. More specifically, the Licensee seeks permission to store spent fuel generated at either Station in the spent fuel storage pools of Units 2 and 3 of the Dresden Station and Units 1 and 2 of the Quad Cities Station. In order to perform this storage, it will be necessary for the Licensee to ship spent fuel from one Station to the other. The details of the Licensee's proposal are contained in the Licensee's application for amendment to its operating license dated May 11, 1978.

In response to a notice of the proposed amendment (43 Fed.Reg. 37245) petitions to intervene in this proceeding and for a hearing were filed by the State of Illinois, the Natural Resources Defense Council, and Citizens for a Better Environment. The latter two Petitioners are represented by the same counsel and make the same arguments. Each Petitioner has stated a number of contentions which it seeks to have admitted into the proceeding.

The Licensee and the Staff of the Nuclear Regulatory Commission have opposed several of these contentions and also have contended

that the Petitioners NRDC/CBE lack standing to intervene under Section 189 of the Atomic Energy Act of 1954, as amended (42 U.S.C. 2239). The parties agreed, and the Board finds that the State of Illinois meets the requirements of standing.

On February 1, 1949, this Board, pursuant to 10 CFR § 2.751(a), held a Special Prehearing Conference in Chicago, Illinois to discuss the question of Petitioners' contentions and standing. This Order contains the Board's rulings on the matters presented at the conference.

STANDING TO INTERVENE -- NRDC/CBE

Section 189 of the Atomic Energy Act provides that "[i]n any proceeding under this Act, for the granting . . . or amending of any license . . . the Commission shall grant a hearing upon the request of any person whose interest may be affected by the proceeding, and shall admit any such person as a party to such proceeding." Since this application seeks to amend the Licensee's operating license, the Petitioners have the right to intervene if they can show an "interest" which may be "affected" by the proceeding. The Commission has held that Section 189 requires "contemporaneous judicial concepts of standing" to be used in applying Section 189. Portland General Electric Company, et al (Pebble Springs Nuclear Plant, Units 1 and 2), CLI-76-27, 4 NRC 610, 614 (1976). The Commission's regulations also provide, in 10 CFR § 2.714, that a petition to intervene "shall set forth with particularity the interest of the petitioner in the proceeding, [and] how that interest may be affected by the results of the proceeding . . . "

In this case, the interest of petitioners NRDC/CBE derives from the allegation that several of their members live in the vicinity of the proposed activities and would be affected by the possible consequences of granting the Licensee's request to load spent fuel at and ship spent fuel between the two Stations. The Petitioners have supplied a map of the relevant area, and have marked it so as to show the location of the alleged residences of their members. Neither the Licensee nor the Staff has disputed the existence of these members, nor that the members live in the locations marked on the map (Tr. p. 23). The Licensee has also stipulated that Petitioners have adequately identified the interest of their members in the proceeding. The Staff,

however, has not chosen to make such a stipulation. According to the Staff, "[t]he fact that someone lives within a particular town might constitute mere yards or several miles, perhaps, from the actual routing." Ibid.

In the opinion of the Board, the Staff's position on this point is inconsistent with controlling precedent. Some years ago the Atomic Safety and Licensing Appeal Board held that "distances of 30 to 40 miles from this reactor site . . . [are] not so great as to require the conclusion that residents . . . are geographically outside of the zone of interests protected by the Atomic Energy Act." Northern States Power Co. (Prairie Island Nuclear Genrating Plant, Units 1 and 2), ALAB-107, 6 AEC 188, 190 (1973). This reasoning also applies to license amendments. Virginia Electric and Power Company (North Anna Nuclear Power Station Units 1 and 2), ALAB-522 (Slip op., Jan. 29, 1979). It is evident from the Petitioners' map that the residence of its members is easily within this distance of the reactor sites, and hence of the activities proposed by the Licensee. The Staff has stipulated the location of these residences. Given this stipulation, the distances on the map, and the Appeal Board's ruling, it is difficult to understand the Staff's position. The Board agrees with the Licensee that the location of the residence of these members establishes clearly that they do not fall "geographically outside the zone of interests" protected by the Act.

The principal challenge to the standing of these Petitioners is on another ground. Both the Licensee and the Staff argue that in order for the Petitioners to satisfy the judicial requirements of standing, at least one of Petitioners' members, who him/herself has standing, must specifically authorize the Petitioners to appear and represent the interest of that member in this case. Petitioners respond that no judicial precedent or decision by the Commission so requires.

Since the parties' briefs were submitted, the Appeal Board has delivered an opinion discussing this precise question. In Houston Lighting & Power Company (Allens Creek Nuclear Generating Station, Unit 1), ALAB-535 (April 4, 1979), the Appeal Board denied standing to the National Lawyers Guild on two grounds. First, because the

Guild refused to identify at least one of its members who would have had standing to bring the action in his or her own behalf, and second, because the Guild had not shown that any member had authorized the Guild to represent his or her interest in the proceeding.

On the question of authorization, the Appeal Board held that it is not necessary for an association to show that a member specifically authorized the suit in question. It must, however, show that the member generally authorized the association to represent the member's interests. (Slip op. at 36). In some cases, the authorization can be presumed:

> "For example, such a presumption could well be appropriate where it appeared that the sole or primary purpose of the petitioner organization was to oppose nuclear power in general or the facility at bar in particular. In such a situation, it might be reasonably inferred that, by joining the organization, the members were implicitly authorizing it to represent any personal interests which might be affected by the proceeding." Id. at 38

Since the Guild had not been formed for the purpose of opposing nuclear power or the Allens Creek facility, and since nothing in its stated objectives might lead a member to conclude that the member was authorizing the Guild to represent his or her interest in that regard, the Guild's authorization could not be presumed. In such a case the Licensing Board could require a specific showing.

In the instant case, the Petitioners have described their organization and purpose, and submitted a copy of NRDC's solicitation materials. No solicitation materials concerning CBE have been submitted, but their Petition for Leave to Intervene states that CBE has "long been concerned with protection, maintenance, and enhancement of the quality of the human environment." Since Petitioners filed their papers before the decision in Allens Creek occurred, Petitioners could not have known of the standard of presumption laid down in that case. Accordingly, Petitioners are hereby invited to file, not later than May 3, 1979, materials which they

believe the Board should consider in deciding whether to presume that they represent the interests of their members with regard to the general issues of this proceeding. We note that in their Petition for Leave to Intervene, Petitioners state that they advise their members of their activities by newsletters, annual reports, etc. It should not be burdensome for the petitioners to furnish the Board with examples of these materials.

CONTENTIONS

Contention 1 asserts that the proposed action would violate the National Environmental Policy Act because the Licensee would be permitted to commit its resources to shipping spent fuel before the Commission has completed its relevant generic impact statements. NRDC has already asked the Commission to suspend further licensing of spent fuel handling pending this generic impact statement; the Commission refused (40 Fed. Reg. 42801, September 16, 1975). Petitioners do not cite any authority for the proposition that the Commission is without power to permit individual licensing actions to continue pending consideration of a generic impact statement, and the Board knows of no such authority. In part (c) of this contention, Petitioners allege that the proposed action would violate the criteria the Commission has set forth for judging licensing applications pending the generic impact statements. These criteria were contained in the Commission's statement of September 16, 1975 (40 Fed. Reg.42801-42802). The Petitioner's allegation here with respect to these criteria is substantially the same as in Contention 8, infra, which has been admitted. Part (c) is admitted as well and will be combined with Contention 8. The balance of Contention 1 is rejected.

The parties agreed at the special Prehearing Conference, and the Board finds, that Contention 2 should be admitted at this stage of the proceeding.

Contention 3, as developed on the record at the Special Prehearing Conference, asserts facts which are specific and relevant to the proposed action, and is accordingly admitted.

Contention 4 is also admitted except for the last two sentences, which challenge the radiation levels set by NRC regulations. Challenges to the regulations are prohibited by 10 CFR § 2.758(a), so these sentences must be and are stricken. At the Special Prehearing Conference, the Staff appeared to contend that the Licensee had no obligation to consider alternatives to the proposed action in order to determine whether radiation exposures from the action would be as low as reasonably achievable. Contention 4 would have the Licensee consider alternatives for this purpose. Under 10 CFR § 20.1(c), licensees whose emissions fall within the range permitted by other sections of Part 20 are nevertheless obliged, by way of an additional requirement, to reduce their emissions to a level which is "as low as reasonably achievable." In the Board's view, this additional requirement would be meaningless unless the effect upon health of emissions produced by the proposed action were compared to the effect which would be produced by an alternative, with, of course, a corresponding comparison between the costs of the alternative and the costs of the proposed action. Only by comparing alternatives is it possible to say whether a given level of emissions is or is not as "low" as "reasonable" in light of the prevailing technology. If an alternative means of achieving the same result as the proposed action produces lower emissions than the proposed action, then the level of emissions produced by the proposed action is not as low as reasonably achievable unless it would not be reasonable to adopt the alternative. It is no surprise that 10 CFR 20.10(c) specifically provides that one must "take into account the state of technology, and the economics of improvements in relation to benefits to the public health and safety . . . ." The Licensee does not object to the admission of Contention 4 with the last two sentences deleted. The Board believes that the Staff's position is inconsistent with 10 CFR § 20.1(c).

Contention 5, as developed on the record at the Special Prehearing Conference, asserts specific factual matters relevant to the proposed action and is admitted.

Contention 6 requires an interpretation of the Commission's policy regarding the vulnerability of spent fuel shipments to sabotage, hijacking, or other malevolent acts. The Contention alleges that the Licensee would be unable to prevent a successful malevolent act against a shipment, that such an act could expose thousands of persons to fatal levels of radiation, that the Licensee has not disclosed any information showing to what extent these shipments would be vulnerable to such an act, and has disclosed no information to show to what extent this represents a serious risk to public health and safety. The Licensee has objected on the ground that the Contention amounts to a challenge to Part 73 of the Commission's regulations. 10 CFR § 73.6 exempts shipments of spent fuel from the requirements of physical protection made by 10 CFR §§ 73.30-73.36, 73.60, 73.70, and 73.72. The staff states that it is now reviewing the security of spent fuel shipments and that contention 6 would be acceptable if reworded.

The Commission's policy for packaging and physical protection of radioactive materials during transport is contained in Parts 31 and 73 of the Commission's regulations. Part 71 sets forth the general requirements under which spent fuel may be shipped. The Licensee states that it possesses a general license under Part 71 to ship spent fuel in a licensed cask and it may ship if it complies with the regulations of the Department of Transportation.

Part 73 of the Commission's regulations are concerned with physical protection of shipments of special nuclear materials, and § 73.6(b) specifically exempts shipments of spent fuel from coverage. For shipments by road of materials which are covered, Part 73 mandates specially-trained armed guards, radio-telephones, specially designed vehicles, contingency plans, special markings, and the like (see, e.g., 10 CFR § 73.31). It is obvious that the Commission believed the nature of the materials protected under Part 73 was such that the risk to their security justified the considerable expense of

protecting them, and that the Commission did not have the same opinion of spent fuel. The materials protected under Part 73, are, however, materials which reasonably could be considered attractive targets for theft. Spent fuel is not in this category since it is of no utility until reprocessed. Since reprocessing requires equipment which is normally inaccessible to malefactors, it is logical not to include spent fuel in a regime designed to prevent theft-prone materials from diversion.

The Licensee interprets § 73.6(b) to mean that the commission intended no protection whatsoever to be given to spent fuel shipments. Licensee also asserts that the Commission intended for questions regarding the security of spent fuel shipments to be excluded from licensing proceedings. The Staff indicated at the Prehearing Conference, however, that nothing in the Commission's Regulations or Statements of Consideration indicate the Commission's specific view on this matter one way or the other (Tr. 62).

When one considers the tone and general import of Part 73, it is clear that the Commission was concerned there with two principal dangers. First, that certain materials might be diverted, and second, that a nuclear installation might be attacked for the purpose of sabotage. Section 73.1 states that the purpose of Part 73 is physical protection "against acts of industrial sabotage" and against "theft" of special nuclear materials. Since the mention of sabotage is not restricted literally to plants, it is possible to read Part 73 as covering sabotage of shipments also, and since spent fuel is exempted, to conclude that no protection from sabotage is necessary for spent fuel shipments.

This reading is plausible if the issue is simple theft since the nature of spent fuel is such that the incentive to steal it is low and the risks of handling it are considerable. Where the issue is sabotage, however, this reading is not obvious at all. The "sabotage value" of spent fuel is quite high. According to a preliminary report prepared for the Commission in May, 1978 by Sandia Laboratories (Generic Environmental Assessment on Transportation of Radioactive Materials Near or Through a Large Densely Populated Area)

the level of radioactivity in spent fuel may make it "an attractive target for sabotage or theft for later dispersal." Id. at 168. Because truck shipments of spent fuel "move on the normal road system and could easily be reached at rest and/or refuelling stops," id., these shipments "are considered readily accessible." Id. at 169. The shipping cask of a diverted shipment could be breached with explosives which are available "on the street" (id. at 161) and the result could be "fracture, spallation, and rupture." Id. With sufficient preparation "a small group could presumably complete such an attack in a short time." Id. If an attack using "breaching charges" succeeded, "some radioactive material of respirable size might become airborne" (id. at 178) and the report concludes that hundreds or even thousands of fatalities might occur from radioactivity alone. Id. at 190-200. Although the choice of attack schemes is limited by the massiveness of the cask (id. at 169) the risk of diversion of truck shipments and their breaching by high explosives is clearly established by the preliminary report.

Contention 6 as presently written asserts that the Licensee is required at least to furnish some information relating to sabotage or hijacking of shipments. Since the Commission's regulations are at best ambiguous, the Board is reluctant to conclude that the Commission intended for questions of sabotage to be excluded totally from licensing. The above-quoted report finds that sabotage of a licensed cask is physically possible. The environmental impacts of spent fuel shipments are clearly not foreclosed from licensing by the exemption in Part 73 (see, e.g., 10 CFR § 51.20(g)), and sabotage would have environmental consequences. It is entirely possible that when the Commission exempted spent fuel shipments from physical protection under Part 73, the Commission assumed that licensing boards in individual proceedings might require some degree of precaution inferior to that of Part 73 where a clear risk could be shown to individual shipments. It is generally assumed that any issue not specifically covered by a general regulation is

open to be urged in licensing. The Licensee apparently urges that issues which might have been covered in general regulations, but were not, or matters which were excluded specifically from coverage of a general regulation, are removed from licensing by a process of negative inference. The danger in following this view is that an important issue could escape consideration by anyone, since either of the bodies charged with deciding it could conclude that the issue had been or would be decided by the other. The Board believes that an issue which is relevant and properly alleged should be admitted into controversy unless it can be shown clearly that it has been excluded by some rule or ruling of the Commission.

Contention 7 asserts that the Licensee has not filed an environmental report. It also asserts that the Licensee has made no analysis of "additional" emergency planning. At the Special Prehearing Conference, NRDC/CBE stated that the word "additional" refers to planning for the portion of the proposed activity which will occur outside the zones of the reactors from which and to which the spent fuel is to be shipped. The Board agrees with the Staff's objection to this Contention. First, with respect to the Licensee's environmental report, it is the duty of the Staff, in its normal procedure of evaluating the Licensee's application, to obtain any information necessary for the Staff to make its environmental analysis, which it will then offer into evidence at the hearing. The "additional" emergency planning, insofar as that term can be given a precise meaning, is covered by admitted Revised Contention 10 and probably by Contention 6 and Revised Contention 11 as well. Contention 7 is therefore rejected.

Contention 8 asserts that the proposed action will violate the standards established by the Commission for evaluating spent fuel handling cases pending completion of the Commission's generic environmental impact statement on spent fuel handling. The standards were set forth in a policy statement by the Commission on September 16, 1975 (40 Fed. Reg. 42801). The standards require that licensing

applications be judged according to certain criteria, one of which is whether the granting of the license would "constitute a commitment of resources that would tend to significantly foreclose the alternatives available with respect to any other individual licensing action of this type." Contention 8 alleges that this licensing action would foreclose such alternatives, so Contention 8 is admitted.

Contention 9 and Revised Contention 10 have been agreed to as admissible by the parties and are hereby admitted.

Revised Contention 11 presents essentially the same issue as Contention 6 and is admitted for the same reason as Contention 6. These Contentions will be consolidated at the proper time.

Contention 13, which is proposed by the State of Illinois, asserts that the application "does not specify the type of license being requested under Part 71," that it does not provide a quality assurance program as required by 10 CFR § 51, and that it does not supply the information required by 10 CFR §§ 71.22, 71.23, 71.24, 71.33, 71.37, and 71.36. The Board agrees with the Licensee that this Contention goes beyond the scope of this proceeding. As the Board reads Part 71, all the information mentioned by Contention 13 would have been considered in an application to receive a license for a shipping container. Once a Licensee has a licensed container, he has a general license to ship with that container under 10 CFR § 71.12. The State of Illinois cannot expect this Board to re-evaluate the information required for a licensing decision already made under Part 71. This is a proceeding under Part 50, and there is ample room for matters going beyond the licensing requirements for shipping containers to be taken up under Illinois' Revised Contention 10, which has been admitted. Contention 13 is rejected.

Illinois' Contention 16 asserts that the Licensee has not discussed in his application the economic effects which would be produced by an accident during the proposed shipments. The petitioner states that the proposed activities are not covered by insurance and that the consequences of this lack of coverage could be important.

Petitioner will withdraw this Contention if insurance is obtained. The Board agrees that insurance coverage of the risks -- however small they be -- of the proposed activity is a legitimate concern of this proceeding. Contention 16 is admitted.

Illinois' original Contentions 12, 14, 15 and 17 have been withdrawn.

It is so ORDERED.

For the Atomic Safety
and Licensing Board

Gary L Milhollin

Gary L. Milhollin, Chairman

Dated at Madison,
Wisconsin, this 19th
day of April, 1979