

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION
BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

IN THE MATTER OF COMMONWEALTH)	
EDISON CO. DRESDEN STATION,)	
Units 2 and 3)	
)	Docket Nos. 50-237
)	50-249
Amendments to Facility)	
Operating License Nos.)	
DPR-19 and DPR-25)	
(Increase Spent Fuel Storage)	
Capacity))	

STATE OF ILLINOIS AMENDED CONTENTIONS

Intervenor, the State of Illinois, pursuant to 10 C.F.R. §2.7, 14(a)(3), hereby amends the contentions submitted in the above-captioned case.

I. Illinois withdraws contentions 1-23 as filed in the Petition of September 8, 1978. In their stead Illinois propounds the following contentions.

A. Applicant has not sufficiently demonstrated a need for the spent fuel pool storage expansion.

1. It has not been demonstrated that failure to grant the license amendment would compel shutdown of Dresden Units 2 and 3.

2. There has been no demonstration that shutdown would adversely affect the community currently being served by Dresden Units 2 and 3. Applicant has not shown that its generating capacity cannot satisfy demand if Dresden Units 2 and 3 are shut down.

3. No analysis has been performed of the costs of replacing Dresden 2 and 3 power output with power from existing fossil fuel plants.

B. Applicant has made no showing that it will be technically and financially capable of meeting the costs of eventual disposal of the waste resulting from the spent fuel that it intends to store in the proposed spent fuel racks.

1. Applicant should submit cost evaluations for handling, transportation, storage, disposal, and permanent surveillance of the spent fuel waste.

2. Applicant should be required to provide a fund or security to cover the cost of waste disposal.

C. The radioactive waste treatment system for the spent fuel pools has not been shown to be adequate for the proposed increase in spent fuel storage capacity.

1. The Application does not quantify the amounts of additional radioactivity to be expected from storage of the damaged and leaking fuel still in the Dresden Units 2 and 3 reactors.

2. The Application gives no assurance that existing cleanup systems can handle additional radioactivity.

D. Since the Application and supporting documentation do not include anti-sabotage and security plans, there is no assurance that adequate protection exists for the additional fuel

to be stored.

E. The Application and the NRC Staff's Safety Evaluation Report and Environmental Impact Appraisal are inadequate in that they do not discuss an accident such as actually occurred at the Three Mile Island Unit 2 facility, as it applies to the reracked Dresden spent fuel pools, or other possible accidents hitherto called "Class 9" (See 45 F.R.40101, June 13, 1980, withdrawing Proposed Annex to 10 C.F.R. Part 50, Appendix D); there is no analysis of the consequences of such an accident, of their effect on the cost-benefit balance for the facility, or of measures to prevent or mitigate the occurrence or effects of such an accident. See NUREG/CR-0722, ORNL/NUREG/TM-287/RI "Fission Product Release from Highly Irradiated LWR Fuel"; See also Webb, R., "An Analysis of the Accident Hazards of Storing Highly Radioactive Spent Fuel Rods in Spent Fuel Storage Pools at Nuclear Power Plants...", April 3, 1979; and Webb, R., "Accident Hazards of Spent Fuel Storage at the Salem Nuclear Power Plant", February 1979 and April 1980.

F. Applicant has not provided adequate monitoring equipment in the spent fuel pool water to detect abnormal releases of radioactive materials from the increased numbers of spent fuel bundles. Absence of such monitoring and alarms could result in undue exposure to workers in excess of ALARA.

1. There is no description of monitoring devices, e.g., dedicated sippers and, therefore, no assurance exists that workers in each pool area will have ad-

equate warning of possible hazardous conditions.

2. In light of the proposed compaction and long-term storage of spent fuel the Applicant should clarify the monitoring system that is used in each pool area and its range of sensitivity, the frequency of released emissions, and the amount of radioactive materials emitted.

G. There is no assurance that the health and safety of workers in the spent fuel pool areas will be adequately protected during rack removal and installation. The Application does not supply adequate information to assess the occupational radiation dosage to workers involved in removing and installing racks and rearranging spent fuel in the pools.

H. Applicant has not analyzed the effects of increased quantities of defective 7x7 fuel bundles being discharged to the Dresden spent fuel pools. They have not analyzed the possible reductions of worker exposures by grouping the defective fuel in one area and providing special devices such as hoods to collect and control the escaping gaseous radioactive material.

I. The Application does not show that the quality control and quality assurance programs of Applicant and its contractors are adequate to assure that tube and rack construction and the boron-10 loading of the Boral in the tubes will meet specifications.

J. The Application does not demonstrate that rack

and tube packaging, transportation, and receipt inspections are adequate to prevent and detect transportation damage.

K. Corrosion.

The Application does not adequately assess the possibility of general corrosion and galvanic corrosion in the racks.


1. The life expectancy of the Boral tubes is unsubstantiated.
2. Swelling of the Boral in the tubes and its effect on removal of fuel rods have not been analyzed.
3. The corrosion surveillance program is inadequate, and there is no plan for steps to be taken should corrosion be discovered in the racks.

L. The Application should include analysis of residual stresses in the racks and development of minimum failure criteria for the racks.

STATE OF ILLINOIS

TYRONE C. FAHNER
Attorney General

BY:


SUSAN N. SEKULER
Assistant Attorney General
Environmental Control Division
188 West Randolph Street
Suite 2315
Chicago, Illinois 60601
(312) 793-2491

OF COUNSEL

ANNE K. MARKEY
Assistant Attorney General

SUSAN N. SEKULER
Assistant Attorney General

PROOF OF SERVICE

I, ATHENA SHELTON, having been sworn and under oath, do state that I have this 4th day of August, 1980, served the foregoing NOTICE and AMENDED CONTENTIONS upon the persons to whom said Notice is directed, by placing same in envelopes addressed to said persons, first class mail, postage prepaid, and depositing same with the United States Post Office, located at 160 North LaSalle Street, Chicago, Illinois 60601.

ATHENA SHELTON

SUBSCRIBED AND SWORN TO
BEFORE ME THIS 4th DAY
OF AUGUST, 1980.

Notary Public