

# Sinnissippi Alliance for the Environment

326 North Avon Street  
Rockford, Illinois 61103

UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

In the Matter of )

COMMONWEALTH EDISON CO., )

Byron Station )

(Units No. 1 and No. 2) )

Docket Nos. 50-454  
50-455

DAARE/SAFE'S REVISED CONTENTIONS  
(April 15, 1982)



Contention 10

The Byron FSAR and SER contain inadequate assurance that Commonwealth Edison will maintain occupational exposures as low as is reasonably achievable, as required by 10 CFR Part 20. The assessment of collective radiation dose to workers from plant operations as described in section 12.4 of the FSAR is not consistent with the acceptance criteria in NUREG-0800, or ALARA, insofar as the applicant's assessment is not based on an analysis "of the tasks involved in the operation of the plant, the expected radiation dose rates, and the personnel required to perform those tasks", but upon an averaging of dosages recieved during selected activities at other plants, despite the following:

- a. Edison's program regarding occupational radiation exposure presently relies upon use of transient and temporary workers to minimize allowable radiation exposures to individual workers to meet regulatory limits,
- b. Edison's occupational radiation exposure program does not provide for the recording of cumulative exposures which workers may receive at Byron and at other nuclear facilities;

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- c. Edison does not attempt to minimize occupational exposures to radiation as much as possible by basing work assignments in high risk areas upon factors such as individual volunteerism and assignments given to individuals with the least demonstrable susceptibility in age and health to radiation effects;
- d. Edison's plant design does not take into account new evidence regarding the dangers of exposure to low levels of radiation; and,
- e. The Byron plant contains inadequate monitoring instrumentation of sufficient quantity and sensitivity to detect variations of radiation; particularly alpha, beta, and gamma radiation.

Applicant should be required to reassess its program regarding occupational radiation exposure and institute corrective action to include the above factors in its program.

#### Contention 11

The turbine-generator placement and orientation at the Byron Units 1 and 2, as identified in SER, 3-10, are unfavorable relative to station reactor buildings. Systems important to safety have been demonstrated to lie "inside the low trajectory missile strike zone." (Regulatory guide 1.115) This warrants relocation of the turbine-generator placement and alteration of its existing orientation.

#### Contention 12

Task Action Plan B-57 identifies the potential safety problems associated with loss of off-site and AC power. In the event of loss of off-site power at the Byron plant, the FSAR and SER demonstrate several failure possibilities in the conversion to alternative power systems due to Edison's reliance upon the following inadequate power components. Several inadvertent and/or unrelated failures in these components in the resultant power re-

duction and systems interaction could render it impossible to operate simultaneously the necessary emergency equipment and safety systems components required to maintain safe reactor shut-down margins under Design Basis Criteria.

- a. Applicant's reliance upon Storage DC Battery units for AC replacement which are subject to time constraints on operability;
- b. Applicant's reliance upon diesel generator coolant pumps; units which, as has yet to be determined, may be possibly defective units manufactured by the Heywood-Taylor Pump Co, now the subject of an investigation by NRC Region IV Office; these units may fail simultaneously;

Certificate of Service

The undersigned, a member of DAARE/SAFE certifies that on this date, April 15, 1982, she served copies of these Revised Contentions on each member of the Service List, by Special Delivery, Regular U.S. Mail, or by other means as necessary,

Diane Chavez, DAARE/SAFE

Date: April 15, 1982  
enc: Service List