

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of

COMMONWEALTH EDISON COMPANY

(Zion Station, Units 1 and 2)

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}
}
} Docket Nos. 50-295
50-304

TESTIMONY OF GARY G. ZECH
ON CONTENTION 2(f)(1)

Contention 2(f)(1) states:

There has been insufficient development of credible accident scenarios. For example:

- (1) There is insufficient documentation to establish the methods by which the Applicant will positively prevent the movement of heavy objects, such as shipping casks or empty fuel racks over the pool during modification; thus, accidental droppings of such heavy objects, which would lead to unacceptable damage to spent fuel or the pool liner and consequent release of radionuclides, has not been precluded.

The procedure that the licensee will use for the movement of empty fuel racks, the potential damage to fuel assemblies, and any release of radionuclides, is addressed in the Staff's testimony of John L. Zudans on Contention 2(f)(2). In addition, Section 2.3 of the Staff's Safety Evaluation (SE) on the proposed modification, entitled "Installation of Racks and Fuel Handling," addresses the potential movement of other loads over the spent fuel pool, including a

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a shipping cask. I supervised the preparation of and contributed to portions of Section 2.3 and adopt it as part of my direct testimony on Contention 2(f)(1).

As indicated in Section 2.3, the licensee has committed to not handle heavy loads in the vicinity of the spent fuel storage pool without first notifying the NRC. In addition, we indicated that, prior to issuing a license amendment authorizing the expansion of the spent fuel pool storage capacity, we intend to impose a technical specification restriction to preclude the handling of any loads greater than a single fuel assembly (plus handling tool) over stored spent fuel. These restrictions will preclude the movement of a shipping cask or empty fuel racks over spent fuel during and after the pool modification.

With regard to the potential for unacceptable damage to the pool liner, in our Safety Evaluation related to operation of the Zion Station, dated October 1972, we concluded that any possible loss of water from the pool due to a cask drop and resultant breach of the liner would be within the makeup capacity of the spent fuel pool cooling system. Any leakage from the liner would be collected and processed in the station liquid waste system thereby preventing any possible release of radionuclides.