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August 17, 1967

CONSOLIDATED EDISON COMPANY OF NEW YORK  
INDIAN POINT NUCLEAR GENERATING UNIT NO. 3  
DOCKET NO. 50-286

The Indian Point Unit No. 3 facility physically is essentially identical to Unit No. 2 which recently was issued a construction permit. The major design differences consist of the following:

- (a) increase in power level from 2758 MW to 3025 MW resulting from a decrease in hot channel factors,
- (b) elimination of the reactor pit crucible ("core catcher") due to reliance on the emergency core cooling system,
- (c) substitution of sodium thiosulfate spray for charcoal filters as the iodine removal system,
- (d) increase in fuel enrichments from 2.23, 2.38, and 2.68% for the three regions to 2.1, 2.6, and 3.2%, and
- (e) an increase in average burnup from  $21,800 \frac{\text{MWD}}{\text{T}}$  to  $22,800 \frac{\text{MWD}}{\text{T}}$ .

Our evaluation will be directed primarily to the five items listed above while the remainder of the application will be reviewed for conformance with current criteria. In addition, those features being evaluated on a continuing basis (e.g., positive moderator coefficient, cold water pressure vessel shock caused by safety injection, and core heatup following a loss-of-coolant accident) will be considered.

In order to facilitate our review, we request Reactor Technology assistance in the following areas:

1. Determination of adequacy of the codes used to calculate blowdown and core heatup following a loss-of-coolant accident.
2. Determination of the adequacy of the codes and experimental data used by Westinghouse in predicting the lower hot channel

3. Comments on the consequences of the thermal shock experienced by the pressure vessel during safety injection.
4. Evaluation of the containment structural design.
5. Evaluation of the degree of compliance of the control and safety systems with the proposed IEEE standards.
6. Evaluation of the degree of compliance of the emergency electrical power system with the Supplementary Criteria for Auxiliary Electrical Power System for Nuclear Power Plants and adequacy of the electrical power system.
7. Performance of a parameter study indicating the sensitivity of off-site doses to assumed efficiencies of the halogen scavenging equipment.

We estimate the following schedule will be followed:

Technical Meeting	August 22, 1967
Questions transmitted to the applicant.	September 15, 1967
ACRS Meeting	February 1968
Hearing	March 1968
Issuance	April 1968

Distribution:

- Suppl.
- DRL Reading
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