

SEP 27 1968

50-286

E. S. Boyd, A/D for Reactor Projects
THRU: S. Levine, A/D for Reactor Technology

Original Signed by

S. Levine

CONSOLIDATED EDISON CO. OF NEW YORK, INC. - INDIAN POINT NUCLEAR GENERATING UNIT NO. 3 - EXEMPTION REQUEST FOR RELEASE OF CONCRETE MAT AND BOTTOM LINER FOR CONSTRUCTION

In order to authorize an exemption for construction of the Indian Point #3 mat and bottom liner, the following information should be obtained from the applicant.

1. Establish where the ground water gradient is with respect to the mat. Discussion so far only has shown that the maximum high water level (of the Hudson River) is 5'-6" below the mat.
2. When the mat segments are poured, what will be the height of each lift?
3. Confirm that the reactor pit drain in Figure 4.4-1 refers only to draining of the subgrade.
4. Show how the interior support walls and columns transfer their shears through the liner into the mat.
5. Show that the assumption of a rigid, non-yielding rock is more conservative for the design than assuming the rock to be elastic.
6. What are the properties of the crushed stone which is used as a fill against the containment wall?
7. Describe how the interaction of the bottom liner and the concrete which it is in contact with, allow the assumption that the liner will not participate in resisting horizontal shears.
8. Clarify whether the liner knuckle is directly backed up with concrete and how this affects the knuckle under pressure, temperature, or seismic loads.

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R. S. Boyd

- 2 -

9. Confirm that page 27, question 6.8, Supplement 2, last line of paragraph 2 should read "ultimate strength of 90,000 psi or greater."
10. Justify that rocking is negligible for the seismic design of the containment.
11. Provide a discussion and justification of the shear reinforcing in the mat as shown in Figure 2.4(a)-2 of Supplement 2. Indicate how far up the wall the diagonal reinforcing will terminate.

Dr. Newmark said that he also would have questions concerning the exemption request and would transmit these to us by phone.

Original Signed By
R. C. DeYoung

R. C. DeYoung, Chief
Containment & Component Technology
Branch
Division of Reactor Licensing

RT-983

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cc: D. R. Muller
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