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CONSOLIDATED EDISON COMPANY OF NEW YORK, INC. - INDIAN POINT NUCLEAR
GENERATING STATION #3 -- DOCKET NO. 50-286, STRUCTURAL REPORT

Enclosed is the report on the structural design of the Indian Point
Nuclear Generating Station #3.

RT-1107
DRL:C&CTB:EGA

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Enclosure:
As stated above.

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INDIAN POINT NUCLEAR GENERATING STATION #3

STRUCTURAL DESIGN

A. INTRODUCTION

Consolidated Edison has engaged Westinghouse Electric Corporation to design and, as prime contractor, construct the Indian Point Unit #3.

Westinghouse has engaged United Engineers and Constructors to provide the design of certain portions of the plant. This is identical to the organizational arrangements for Indian Point #2.

B. GENERAL STRUCTURAL DESIGN

General foundation conditions have already been reviewed and accepted by us and our consultants in concurring with the exemption request to the construction permit. Any grouting of the foundation rock will be reviewed by our consultants to ensure that field conditions confirm the site predictions.

Our consultants also would like to review, when completed by the applicant, a study of flooding potential under concurrent maximum rainfall and dam failure.

The seismic design criteria are, for Operating Basis and Design Basis Earthquakes respectively, 0.10g horizontal and 0.05g vertical accelerations and 0.15g horizontal and 0.10g vertical accelerations. These are acceptable to us and our seismic consultants.

C. CONTAINMENT STRUCTURAL DESIGN

The containment structure on Indian Point Unit #3 is identical to the containment structure on Unit #2. The containment mat has been reviewed

and accepted under the exemption request granted the applicant. Cadweld reinforcing bar splicing criteria have also been found acceptable.

The liner, its Nelson stud anchors and liner insulation have been adequately developed to ensure that potential liner buckling can be controlled by the system.

Diagonal reinforcing will be utilized in addition to the horizontal and vertical cylinder reinforcing to handle the shears generated by earthquake or wind.

Construction methods and quality assurance and quality control measures are adequately covered in the PSAR and, in general, are similar to those proposed for other recently reviewed facilities.

Pre-operational testing, consisting of a strength test, gross leak rate test and sensitive leak rate test, is satisfactory and consistent with previous applications. Post-operational testing will consist mainly of monitoring double penetrations and the liner seam weld channels which will be placed over all seams on the bottom liner, and in a predetermined zone on the walls and dome.

D. CONCLUSIONS

We feel that the containment and Class I structures will be adequately designed, constructed and tested under the criteria presented by the applicant.