POWER AUTHORITY OF THE STATE OF NEW YORK
10 COLUMBUS CIRCLE NEW YORK, N.Y. 10019
(212) 397-6200

April 28, 1983
IPN-83-29

Director of Nuclear Reactor Regulation
U. S. Nuclear Regulatory Commission
Washington, D. C. 20555

Attention: Mr. Steven A. Varga, Chief
Operating Reactors Branch No. 1
Division of Licensing

Subject: Indian Point 3 Nuclear Power Plant
Docket No. 50-286
Modifications of the Control Room (CR) Ceiling
Eggcrate Ceiling Supports

Dear Sir:

Attachment A to this letter provides a description of a modification to the Indian Point 3 CR ceiling which the Authority is planning to implement prior to startup from the current refueling outage.

Should you or your staff have any questions regarding this matter, please contact Mr. P. Kokolakis of my staff.

Very truly yours,

J. P. Bayne
Executive Vice President
Nuclear Generation

cc: Resident Inspector's Office
Indian Point Unit 3
U. S. Nuclear Regulatory Commission
P. O. Box 66
Buchanan, New York 10511

A001

ATTACHMENT A

DESCRIPTION OF MODIFICATION
TO THE CR CEILING EGGCRATE CEILING SUPPORTS

POWER AUTHORITY OF THE STATE OF NEW YORK
INDIAN POINT 3 NUCLEAR POWER PLANT
DOCKET NO. 50-286
April 28, 1983

DESCRIPTION OF MODIFICATION TO THE CR EGGCRATE CEILING SUPPORTS

I. PURPOSE:

To increase the stability of the eggcrate ceiling in the Control Room in order to prevent the fall of a transite panel.

II. DESCRIPTION OF EXISTING CONDITIONS:

The unit 3 control room ceiling utilizes light fixture hangers, typically consisting of Unistrut channels bolted to continuous Unistrut concrete inserts embedded into the slab above. One-quarter inch thick transite panels are supported by flanges of the light fixtures. The eggcrate panel ceiling below is supported by an aluminum tee-bar grid which, in turn, is hung from the light fixture supports by 1/4-inch diameter rods. Perforated aluminum acoustical end panels typically span between the tee-bar grid and the structure.

The light fixtures which support the 1/4-inch thick transite panels are bolted to the hangers. Other light fixtures located flush with the eggcrate ceiling are hung from the Unistrut concrete inserts by Unistrut channel sections.

The transite panels rest on the light fixture flanges without any positive, mechanical connections. The transite panels were cut and installed in the field so that the gap between the panel edges and the vertical faces of the light fixtures does not exceed the overlap between the panel and the light fixture flange. An observed sampling of the panels confirms this. Therefore, the transite panels could fall if the space between adjacent fixtures was to increase through deflection of many fixtures so that their gaps could accumulate sufficiently.

III. DESCRIPTION OF PROPOSED MODIFICATION:

The suggested modification consists of securing the eggcrate ceiling panels to the tee-bar grid by cable ties. This will prevent the panels from falling. The connection of adjacent panels will form a net which is capable of retaining any of the transite panels above from falling onto the control room equipment or operators in the event of a design basis earthquake at the Indian Point Site. In accordance with the Authority's evaluation, the minimum tensile strength of the cable ties required is 50 lbs. (see attached sketch 1).

IV. EVALUATION OF PROPOSED MODIFICATION:

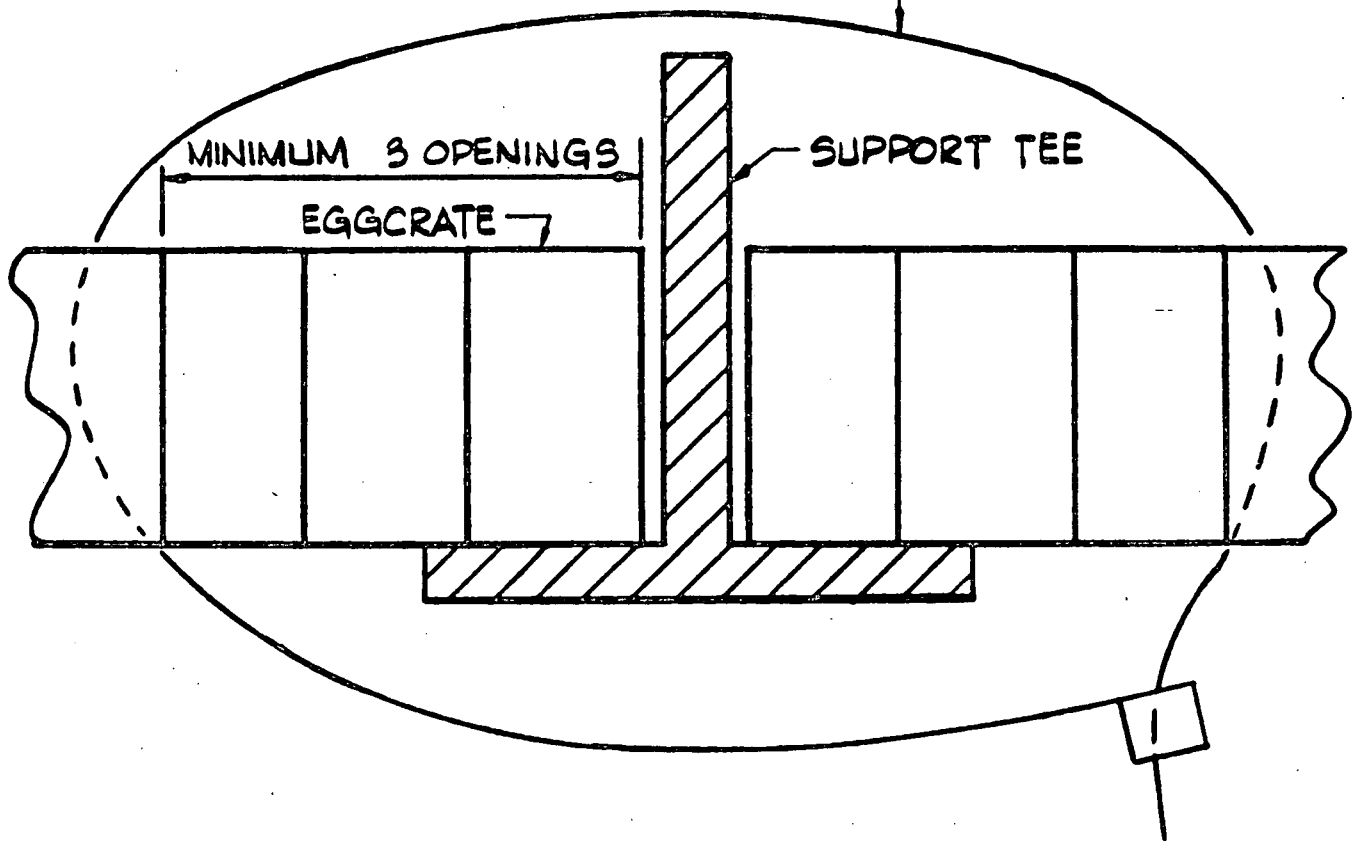
It has been determined that the impact of the proposed Indian Point 3 control room ceiling modifications, when taken with the other modifications that constitute Amendment 1 to the Indian Point Probabalistic Safety Study (IPPSS), will be to make the Amendment 1 analysis presented in Section 7.2.5.A of the IPPSS obsolete. The results of the original analysis presented in Section 7.2.5 will apply and hence, the seismic initiated annual core melt frequency will be reduced from 9.3×10^{-6} to 3.1×10^{-6}.

BILL OF MATERIAL

PANDUIT CORP
SELF LOCKING CABLE TIES

PART # PLT 6H; 175 LB. TENSILE STRENGTH
20 1/8" LG. x 0.35" DIA.

600 REQUIRED



SKETCH 1

REV	DATE	DESCRIPTION	DWN	CHK	DS	DAE	DE	DD
M		ISSUE PI						

ENGINEER
STATE REG NO.

DWG. NO. 108210-SK-002 REV.

SHT. NO. 1 OF 1

DATE	DWN	CHK	DS	DE	PROJ ENG MGR
3-14-83	JNF	JAO			
			DAE	DD	

INDIAN POINT 3 NUCLEAR POWER PLANT
CONTROL ROOM CEILING
EGGCRATE ENHANCED SUPPORT

POWER AUTHORITY OF THE STATE OF NEW YORK