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May 24, 1979
IPN-79-27

TELECOPIED

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

Attention: Mr. Albert Schwencer, Chief
Operating Reactors Branch No. 1
Division of Operating Reactors

Subject: Indian Point 3 Nuclear Power Plant
Docket No. 50-286
Supplemental Response to IE Bulletin No. 79-07

Dear Sir:


This letter is in response to requests by the Nuclear Regulatory Commission (NRC) on May 23, 1979 for further information as related to I.E. Bulletin 79-07. This letter supplements our letters of April 24 and May 22, 1979.

The analytic method the Authority intends to use in the piping stress re-analysis program now underway, together with the basis for its use, is provided as Attachment 1.

Your approval of this method is requested.

Very truly yours,

REGULATORY DOCKET FILE COPY


Paul J. Early
Assistant Chief Engineer-
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Att.
PJE:rz

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ATTACHMENT 1

Indian Point 3 Nuclear Power Plant
Piping Seismic Stress Analytic Method

In accordance with the agreement reached during the NRC-Power Authority meeting of May 22-23, 1979, the piping systems identified in Attachments 1, 2 and 3 of the Authority letter IPN-79-26 dated May 22, 1979 will be re-evaluated as follows:

- a. The seismic analysis will be performed for the OBE loading condition using the response spectrum analysis approach. The Amplified Response Spectra (ARS) associated with one horizontal (X) component and the vertical (Y) component of the seismic excitation will be considered simultaneously. The analysis will be repeated for the horizontal (Z) component and the vertical (Y) component. The re-analyses will be performed with the UE&C-ADLPIPE-2 computer code and a computer user option which uses the Square Root of the Sum of the Squares (SRSS) for both the intra and the inter modal responses. From these two cases, worst case values for the pipe seismic stresses, support loads and component nozzle loads will be multiplied by a factor of 1.38 and then combined with other applicable loadings. Results from loading conditions other than seismic will not be re-calculated since they are not affected by NRC I&E Bulletin 79-07.
- b. The factor 1.38 when used in combination with above mentioned computer user option addresses the most conservative interpretation of the FSAR commitments regarding the intra modal response combination.
- c. The results obtained from the OBE seismic re-analyses will be multiplied by 1.5 to yield the DBE seismic condition values.

Should a result calculated with the approach presented above exceed the applicable allowable limit, a re-analysis may be performed using an equivalent analytical approach which includes all three earthquake components and uses the SRSS method for both the inter and intra modal responses. In this latter re-analysis, the factor 1.38 will not be applied.