



John C. Brons
Senior Vice President
Nuclear Generation

February , 1987
IPN-87- 08

U.S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, D.C. 20555

Subject: Indian Point 3 Nuclear Power Plant
Docket No. 50-286
Inservice Inspection Program; Relief from Volumetric
Examination of Six Reactor Vessel Flange Ligaments

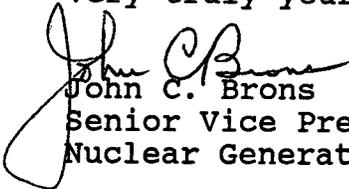
Dear Sir:

This letter requests relief from the Section XI inspection requirements of the ASME Boiler & Pressure Vessel Code, 1974 Edition with Addenda through Summer 1975. Pursuant to 10 CFR 50.55a, relief is proposed from the volumetric examination of six of the reactor vessel flange ligaments. This relief request applies specifically to the first ten year interval of the Indian Point 3 (IP-3) Weld and Support Inservice Inspection (ISI) Program.

In accordance with 10 CFR 170.12, a check in the amount of \$150.00 is enclosed as payment of the application fee for the review of these proposed changes to the first ten year ISI Program required by 10 CFR 50.55a.

Your review of this relief request prior to the start of the Cycle 5/6 Refueling Outage is requested. This will allow incorporating the outcome of this request into the final inspection period of the first ten year ISI interval. Should you or your staff have any questions regarding this matter, please contact Mr. P. Kokolakis of my staff.

Very truly yours,


John C. Brons
Senior Vice President
Nuclear Generation

Attachment
cc: next page

8703040594 870208
PDR ADDCK 05000286
G PDR

A047
w/ check
\$150.00

cc: U.S. Nuclear Regulatory Commission
631 Park Avenue
King of Prussia, PA 19406

Resident Inspector's Office
Indian Point Unit 3
U.S. Nuclear Regulatory Commission
P.O. Box 215
Buchanan, NY 10511

Don Neighbors, Senior Project Manager
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NEW YORK POWER AUTHORITY
INDIAN POINT 3 NUCLEAR POWER PLANT

PROPOSED INSERVICE INSPECTION RELIEF REQUEST

The Indian Point Unit 3 Weld and Support Inservice Inspection Program is based on Section XI of the ASME Boiler and Pressure Vessel Code, 1974 Edition with Addenda through Summer 1975. The Authority hereby requests relief from the specific Code requirements as outlined below:

1. Category B-G-1, Reactor Vessel Flange Ligaments

Item Number B1.9 - Flange Ligaments

Areas Subject to Examination

The areas shall include bolts, studs, nuts, bushings, washers, threads in base material and flange ligaments between threaded stud holes.

Extent and Frequency of Examination

The examinations performed during each inspection interval shall cover 100% of the bolts, studs, nuts, bushings, threads in base material and flange ligaments between threaded stud holes.

Bushings, threads, and ligaments in base material of flanges are required to be examined only when the connection is disassembled.

Bolting may be examined either in place under tension, when the connection is disassembled, or when the bolting is removed.

Method of Examination - Volumetric.

Alternate Examination Proposed - None.

Basis for Relief Request

The Indian Point Unit 3 reactor Vessel has a total of 54 flange ligaments that require 100% volumetric examination in accordance with ASME Section XI, 1974 Edition, Summer 1975 Addenda. Due to the high levels of radiation in this area (1R/hr), an automated remote inspection tool is utilized to

perform this inspection. This tool has limited capability to examine all of the reactor vessel's 54 flange ligaments. Only 48 of the 54 flange ligaments (88%) will have been examined by the end of the first ten year ISI interval. To date, a total of 37 flange ligaments have been examined for which no indications have been identified. Six (Nos. 11, 12, 13, 43, 44, 45) of the 54 flange ligaments cannot be examined due to interferences from the two reactor vessel guide studs located in the flange, Holes 12 and 44. Repositioning of the two guide studs to other locations prohibits alignment of the latching mechanisms of the upper and the lower internals with the lifting rig. In addition, repositioning these guide studs can interfere with transfer of both reactor vessel internals (upper and lower) to their associated storage stands on either side of the reactor vessel.

Manual examination of the six flange ligaments is a major ALARA concern in performing this type of examination due to high radiation levels. A preliminary dose estimate was performed for the inservice inspection of the reactor vessel flange ligaments. The tasks involved in the job include preparation, testing, and health physics coverage. Based on a survey in 1985 during the reactor head lift, dose rates are expected to be approximately 1.0 R/hr at the reactor vessel flange.

Preparation: 24 man-hours
Testing: 6 man-hours
HP Coverage: 2 man-hours
32 man-hours x 1 r/hr = 32 man-rem

In addition to the estimated 32 man-rem, there is the additional consideration of higher dose rates in the entire cavity and on the 95-foot elevation due to the unshielded portions of the upper internals which extend above the reactor vessel flange. The length of time the upper internals are exposed to air could result in significant airborne contamination in containment with the potential for related internal exposures.

Based on the preceding factors, the Authority requests relief from performing a volumetric examination of Reactor Vessel Flange Ligament Nos. 11, 12, 13, 43, 44, 45 during the first ten year ISI interval.