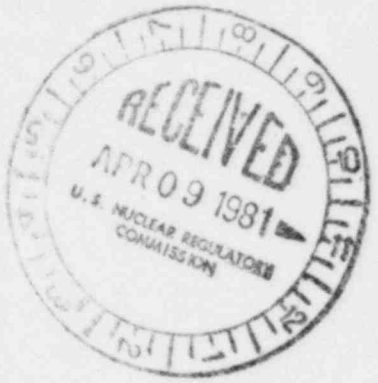
TERA

UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

April 3, 1981




Docket No. 50-286

Mr. George T. Berry, President
and Chief Operating Officer
Power Authority of the State
of New York
10 Columbus Circle
New York, New York 10019

Dear Mr. Berry:

We have reviewed the inservice inspection program for Indian Point, Unit No. 3, that was submitted December 12, 1980. We also reviewed the information you provided in your June 27, 1980 letter. Based on our review, we will need additional information, as indicated in the enclosure, to continue our evaluation. Please provide this information within 45 days of receipt of this letter.

Sincerely,

Steven A. Varga, Chief
Operating Reactors Branch #1
Division of Licensing

Enclosure:
Request for Additional
Information

cc w/encl:
See next page

Mr. George T. Berry
Power Authority of the State of New York

cc: White Plains Public Library
100 Martine Avenue
White Plains, New York 10601

Mr. Charles M. Pratt
Assistant General Counsel
Power Authority of the
State of New York
10 Columbus Circle
New York, New York 10019

Ms. Ellyn Weiss
Sheldon, Harmon and Weiss
1725 I Street, N.W., Suite 506
Washington, D. C. 20006

Dr. Lawrence D. Quarles
Apartment 51
Kendal at Longwood
Kennett Square, Pennsylvania 19348

Mr. George M. Wilverding
Manager - Nuclear Licensing
Power Authority of the
State of New York
10 Columbus Circle
New York, New York 10019

Theodore A. Rebelowski
Resident Inspector
Indian Point Nuclear Generating
U. S. Nuclear Regulatory Commission
Post Office Box 38
Buchanan, New York 10511

Joan Holt, Project Director
New York Public Interest
Research Group, Inc.
5 Beekman Street
New York, New York 10038

Mr. J. P. Bayne, Senior Vice Pres.
Power Authority of the State
of New York
10 Columbus Circle
New York, New York 10019

Mr. John C. Brons, Resident Manager
Indian Point 3 Nuclear Power Plant
P.O. Box 215
Buchanan, New York 10511

Ezra I. Bialik
Assistant Attorney General
Environmental Protection Bureau
New York State Department of Law
2 World Trade Center
New York, New York 10047

ENCLOSURE

INDIAN POINT 3
NUCLEAR POWER PLANT

REQUEST FOR ADDITIONAL INFORMATION

Inservice Inspection Section
Materials Engineering Branch

1. Confirm that all deviations from Section XI requirements have been noted in your ISI program submittal of December 12, 1980 or meet the criteria of Paragraph IWA-2240 in the code. Describe the records which are retained when IWA-2240 is invoked.

2. The Indian Point 3 Inservice Inspection Program you have submitted for review covers the second inspection period in the first ten year interval. Paragraph 50.55a(g)(4)(iii) now permits the same code edition and addenda to be used for the balance of the first ten year interval. Your program may therefore be revised at your option to include examinations and relief requests for the last period in the first interval.

3. You state that Class 3 systems which are in continuous operation during all modes of plant operation cannot be subjected to the code pressure tests. Describe the program that will be utilized for visual examinations, including frequency and extent of examinations.

4. Appendix III, "Ultrasonic Examination of Class 1 and 2 Ferritic Steel Piping Systems" in the Winter 1975 Addenda of Section XI is not approved in 10CFR 50.55a(b). However, Appendix III in the 1977 Edition through Summer 1978 Addenda is approved and may be used in your program. Alternatively, you may provide for our review and evaluation a detailed listing of all differences between the two versions of Appendix III.

   Since DAC recording levels are not specified in Appendix III, the guidelines presented in the April 1 and 2, 1980 meeting between the NRC staff and PASNY must be incorporated into your program. They are:

   a) Indications of 50% of DAC or greater shall be recorded.

   b) Any indication 100% of DAC or greater shall be evaluated by a Level II or Level III examiner to the extent necessary to determine the size, shape, identity, and location of the reflector.

   c) Any non-geometric indication 20% of DAC or greater discovered during the ultrasonic examination shall be recorded and investigated by a Level II or Level III examiner to the extent necessary to determine the shape, identity, and location of the reflector.

5. The proposed inspection plan for code Class 1 and 2 welds utilizing various requirements from the 1974 Edition and the 1977 Edition through Summer 1978 Addenda is not explicitly defined and cannot be evaluated. Supply specific information concerning the extent of examination, the areas and volumes to be examined, and methods of examination for each code category of piping welds. Our review and evaluation will be based upon compliance with 50.55a(b)(2) in 10CFR50.

6. Your reference to Paragraph T-532 in Section V for extent of pipe weld examinations

is not germane since you have requested to use Appendix III in Section XI. Discuss your degree of compliance with the extent of examination requirements in Appendix III and Section XI for pipe to fitting and pipe to vessel nozzle welds.

Requests for relief from examinations of pipe welds with restricted access due to supports or hangers will be evaluated after the welds are identified.

7. Paragraph IWC-1220(c) in the 1974 Edition of Section XI permits ECCS components to be exempted from volumetric and surface examinations provided the control of fluid chemistry is verified through periodic sampling. The control of fluid chemistry is intended to minimize corrosive effects. The "chemistry control" provision was deleted from the 1977 Edition of Section XI because practical evaluation, review, and acceptance standards were not defined. This exemption is not an acceptable basis for eliminating volumetric or surface examinations of ECCS components. Revise your program to include the lines and components previously exempted by IWC-1220(c).

   List the welds in the emergency core cooling, residual heat removal and containment heat removal systems which are scheduled for volumetric and/or surface examinations in your program.

8. Your program states that code required examinations will be performed on five or ten percent of the lower head peel segment meridional welds and the lower head disc to peel segment circumferential weld. Indicate if relief is required for these welds. If relief is necessary, provide evidence, with drawings if necessary, that code required examinations from inside and outside the vessel are impractical due to the limitations of design, geometry, or materials of construction. Also, furnish an estimate of the radiation exposure in man-rem to complete these examinations. Discuss the feasibility of performing remote inspections where radiation is the only justification for relief.

   Confirm that all Category B-A reactor welds will be examined in accordance with code requirements, particularly Figures IWB-3510.1 and IWB-3510.2 in the Summer 1974 Addenda to the 1974 Edition of Section XI.

   Indicate if partial volumetric or surface examinations can be performed on the closure head disc to peel segment weld.

9. Provide a sketch or drawing illustrating the limited access or describe in detail the limitations which prevent surface examinations of reactor vessel nozzle to safe-end welds. Estimate the radiation exposure in man-rem to conduct these examinations. Similarly, provide information describing the limited access of the pressurizer for examination of Category B-B longitudinal and circumferential welds. To maintain the code required weld length to be examined in the pressurizer, accessible welds should be inspected in excess of the code requirements where practical.

   Indicate if welds considered inaccessible for volumetric or surface examination will be subjected to visual examinations during pressure testing.

10. Estimate the percentage of code required volume and area which can be examined in the steam generator nozzle to safe end and safe end to pipe welds. Confirm that these welds will be subjected to visual examinations during pressure testing.

11. Verify that surface examinations will be performed on the stainless steel elbows in the crossover leg of the RCS. Indicate the number of elbows for which relief is required.

12. Discuss your conformance with the 1977 Edition through Summer 1978 Addenda requirements for Class I integrally welded supports for piping and reactor coolant pumps.

13. Estimate the percentage of code required volume which can be examined in reactor coolant branch nozzle connections and Class 2 branch pipe to pipe welds.

14. Provide additional information concerning the "structure and nature" of integrally welded pump support materials which make UT impractical.