

DEC 23 1985

Docket No. 50-271

Vermont Yankee Nuclear Power Corporation
ATTN: Mr. Warren P. Murphy
Vice President and Manager
of Operations

RD 5, Box 169
Ferry Road
Brattleboro, Vermont 05301

Gentlemen:

Subject: NRC Independent Measurements

The NRC will perform an independent verification inspection during the period January 21 through January 31, 1986 at Vermont Yankee Nuclear Power Station, using the NRC Nondestructive Examination (NDE) Van and contractor technicians under NRC direction. The replacement piping system welds will be re-examined on a sampling basis as a supplement to our current inspection program. Similar nondestructive examinations have been conducted by the NRC at other operating facilities.

The inspection will consist of the required piping code fabrication and installation examinations and review of quality documentation. The NRC staff will work closely with your staff to develop a work schedule that will minimize our impact on your outage schedule. We anticipate we will require 6 hours each night, distributed over the two week period, of containment access to perform radiography. During the performance of radiography, we will require restricted personnel access to containment for radiological safety purposes.

You should prepare and transmit, to the attention of Harry W. Kerch, Region I, a list of required information necessary for the NRC team to obtain access to the Vermont Yankee Station. Also please forward the weld data packages, as described in Attachment A, to the Region I office by January 6, 1986.

Members of your staff will be kept informed of our inspection progress and significant findings. An exit meeting with you or members of your staff will be conducted on January 31, 1986, in accordance with our normal procedures. The evaluation of examination results and preparation of an inspection report will be completed and the results of the inspection will be transmitted to you through the standard NRC inspection report.

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Vermont Yankee Nuclear Power Corporation2

Additional information relating to the NDE van activities at your facility are discussed in Attachments A, B and C.

Sincerely,

Original Signed By

Stewart D. Ebnetter, Director
Division of Reactor Safety

Attachments:
As Stated

cc w/attchs:

R. W. Capstick, Licensing Engineer
W. F. Conway, President and Chief Executive Officer
J. P. Pelletier, Plant Manager
Donald Hunter, Vice President
Cort Richardson, Vermont Public Interest Research Group, Inc.
Public Document Room (PDR)
Local Public Document Room (LPDR)
Nuclear Safety Information Center (NSIC)
NRC Resident Inspector
State of New Hampshire
State of Vermont

bcc w/attchs:

Region I Docket Room (with concurrences)
Management Assistant, DRMA (w/o encl)
Section Chief, DRP
M. McBride, RI, Pilgrim
H. Eichenholz, SRI, Yankee
V. Rooney, LPM, NRR

RI:DRS
Kerch
12/20/85

RI:DRS
Wiggins
12/20/85

RI:DRS
Durr
12/20/85

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DATA PACKAGES - ATTACHMENT A

After the welds have been selected by the NRC Senior Resident Inspector for NDE inspection, we request that you prepare a package containing the following on each weld:

- Inspection Report
- Weld History (QC History)
- Material Certifications for base materials
- Weld Wire Certifications
- Piping drawings, isometric of welds locations
- NDE Reports on all NDE performed
- NDE Procedures for RT, PT, MT and VT
- Weld Procedures
- Bolt Torquing Procedures (Structural and
Pipe Hangers)
- Piping and Installation Procedure (only section
that specifies code and addenda)

The assembled packages should be forwarded to:

US Nuclear Regulatory Commission
Region I
631 Park Avenue
King of Prussia, Pennsylvania 19406

ATTN: Mr. Harry Kerch

SUPPLEMENTAL NDE VAN INFORMATION

ATTACHMENT B

1. NDE Van Support Requirements

We request that the NRC-NDE Van be positioned as near as practicable to the containment area entrance to facilitate the performance of inspections.

- a. The van requires the following connections while sited at your facility:
 - Site water with a garden hose connection - this water is for film rinse.
 - Requirement for film rinse water drain (continual). No chemical disposal will occur from the van without prior concurrence from appropriate licensee personnel. At the end of the independent inspection, the NRC needs to dispose of the film developing chemicals prior to moving the van from the site.
 - Two 30 amp, 110 volt circuits are required for operation of the van.
- b. The van will contain PT and MT approve materials. The team will need two rolls of your chemically approved tape and two approved markers for identifying welds and marking weld areas.
- c. It will be necessary for you to remove the paint, rust or other material that could interfere with PT or MT on the selected welds. Also, we will need scaffolding erected and insulation removed for access.

2. Administrative Information

- a. The radiation source will be a nominal 100 curie IR-192 source. This source is licensed by NRC, but owned by the NRC contractor.
- b. The names of the NRC and contractor NDE personnel will be supplied to you by Region I. Clearance for these personnel is necessary.

Attachment B (Continued)

- c. We request that you hold a mini-radiation safety training course for the NRC NDE personnel. This course should familiarize the personnel with your facility and procedures and should not exceed 2 hours in length.
- d. A camera site pass will be needed for a Canon AE-1, 35 mm, camera, Serial No. 1969401.
- e. The NDE personnel will be using 5 watt Motorola radios on the site; the frequency used by the NRC is 165.6625 MHz.

SCOPE OF INSPECTION

ATTACHMENT C

The NDE van team will perform the following examinations and inspections as appropriate:

Radiography:

Pipe butt and socket welds and other appropriate pressure boundary components.

Ultrasonics:

Flaw detection and material thickness measurements, as appropriate, of piping, welds, structural components, vessels, heat exchangers, bolts and other equipment.

Liquid Penetrant:

Piping system components and structural elements.

Magnetic Particle

Piping system components and structural elements.

Hardness Testing:

All of the previously listed components.

Windsor Probe:

Safety related concrete.

Delta Ferrite Indications (Severn Gage):

Stainless steel welds.

Alloy Analysis:

Selected metallic components will have confirmatory chemical analysis performed.

Visual Examinations:

Weld quality and configuration verification of piping and structural systems.

Quality Records Review:

Welding documentation, materials and personnel certification, NDE records to include radiographs.