VIRGINIA ELECTRIC AND POWER COMPANY
RICHMOND, VIRGINIA 23261

April 29, 1994

United States Nuclear Regulatory Commission
Attention: Document Control Desk
Washington, D. C. 20555

Serial No. 94-276
NO/ETS
Docket Nos. 50-280
License Nos. DPR-32

Gentlemen:

VIRGINIA ELECTRIC AND POWER COMPANY
SURRY POWER STATION UNIT 1
INSERVICE INSPECTION PROGRAM RELIEF REQUEST

During the recent refueling outage, Surry Unit 1 completed its second ten-year interval inservice inspections. Examinations during this interval were conducted to the requirements of the 1980 Edition and Winter 1980 Addenda of ASME Section XI.

Pursuant to 10 CFR 50.55a (g) 5, relief is requested from certain requirements of ASME Section XI associated with partial examinations conducted during the 1994 Surry Unit 1 refueling outage. Relief request, RR-020, is attached and provides the basis of this request.

This relief request has been reviewed and approved by the Station Nuclear Safety and Operating Committee.

Should you have any additional questions or require additional information, please contact us.

Very truly yours,

for W. L. Stewart
Senior Vice President - Nuclear

Attachment

cc: U. S. Nuclear Regulatory Commission
Region II
101 Marietta Street, N. W.
Suite 2900
Atlanta, Georgia 30323

Mr. M. W. Branch
NRC Senior Resident Inspector
Surry Power Station

A047

Attachment 1

Surry Power Station Unit 1

ISI Examination Relief

Relief Request SR-020

I. Identification of Components

Weld No.	Line/Mark No.	System	Drawing Number	Class
1-12	27½"-RC-6-2501R	RC	11448-WMKS-0101AZ-1	1
1-19	31"-RC-8-2501R	RC	11448-WMKS-0102AZ-1	1
2-09	1-RC-E-1A	RC	11448-WMKS-RC-E-1A.2	2
2-02	1-RC-E-1A	RC	11448-WMKS-RC-E-1A.1	2
	1-RC-E-1B	RC	11448-WMKS-RC-E-1B.1	2
	1-RC-E-1C	RC	11448-WMKS-RC-E-1C.1	2

System Abbreviations

RC - Reactor Coolant System

II. Impracticable Code Requirements

The 1980 Edition, Winter 1980 Addenda (inclusive) of ASME Section XI in Tables IWB-2500-1 and IWC-2500-1 does not allow any limitations to the required volumetric and surface examinations. Code Case N-460 (Alternative Examination Coverage For Class 1 and Class 2 Welds) allows a reduction in coverage, if the reduction is less than 10%.

III. Basis For relief

The components listed above have been examined to the extent practicable as required by the Code. Due to interferences of other components or weld joint geometry the reduction in coverage for the listed components was greater than 10%. Tables SR-020-1, 2 and 3 are provided detailing the limitations experienced. Amplifying sketches or drawings are also provided. Alternative components could not be substituted for examination due to the mandatory selection requirements of the Code, or because the examination coverage attained was representative of what could be expected for that type configuration.

IV. Alternate provisions

It is proposed that the examinations already completed at the reduced coverage be counted as meeting the Code requirements.

Table SR-020-1
Surry Unit 1
Examination Coverage Estimates (Piping)

Weld No.	Category	Item No.	UT Scan Coverage % 2	5	7	8	Reason For Partial	Sketch/Drawing No.
1-12	B-J	B9.11	38	57	100	100	Pipe to Reactor Coolant pump configuration. 2t Calibration achived maximum coverage practicable.	1/ 11448-WMKS-0101AZ-1
1-19	B-J	B9.12	84	84	92	92	Code Fabrication Tag configuration.	2/ 11448-WMKS-0102AZ-1

Table SR-020-2
Surry Unit 1
***Examination Coverage Estimates (Nozzle To Shell)**
Category C-B, Item C2.21

Weld No.	Beam Angle	Exam Area	Scan Direction	%Exam	Reason For Partial	Sketch/Drawing No.
2-09	0	Weld & Base		100	Weld configuration,	3
	45	Weld & Base	2	83	and support band.	11448-WMKS-RC-E-1A.2
(0°-360°)	45	Weld & Base	5	83		
	45	Weld & Base	7 & 8	100		
	60	Weld & Base	2	90.4		
	60	Weld & Base	5	91		
	60	Weld & Base	7 & 8	100		

0" to 16" examined in 1986 and 16" to 33" examined in 1988. 360° was examined in 1994, because examination results from earlier examinations did not give specific scan coverage percentages. The examination reports indicated what caused limitations, but not the degree of limitation by scan.

UT Scan Direction Definitions.

2 - Axial scan pipe side of weld

5 - Axial scan nozzle/shell side of weld

7 - Circumferential scan, clockwise

8 - Circumferential scan, counterclockwise

Table SR-020-3
Surry Unit 1
***Examination Coverage Estimates (Steam Generator)**
Category C-A, Item C1.30

Weld No.	Beam Angle	Exam Area	Scan Direction	%Exam	Reason For Partial	Sketch/Drawing No.
2-02	0	Weld		100	Handholes,	11448-WMKS-RC-E-1A.1
	0	Base Metal		100	nozzles and	11448-WMKS-RC-E-1B.1
(0°-360°)	45	Weld	2	98.6	welded lugs	11448-WMKS-RC-E-1C.1
	45	Weld	5	91.7		
	45	Weld	7 & 8	100		
	45	Base Metal	2 & 5	99		
	45	Base Metal	7 & 8	100		
	60	Weld	2	95		
	60	Weld	5	84.5		
	60	Weld	7 & 8	100		
	60	Base Metal	2 & 5	99%		
	60	Base Metal	7 & 8	100%		

* Estimates are based on 1988 and 1994 examination results. Earlier examination results (Period 1) occurred prior to our procedures requiring specific scan coverage percentages. The examination reports indicated what caused limitations, but not the degree of limitation by scan.

UT Scan Direction Definitions.

2 - Axial scan tube sheet side of weld

5 - Axial scan shell side of weld

7 - Circumferential scan, clockwise

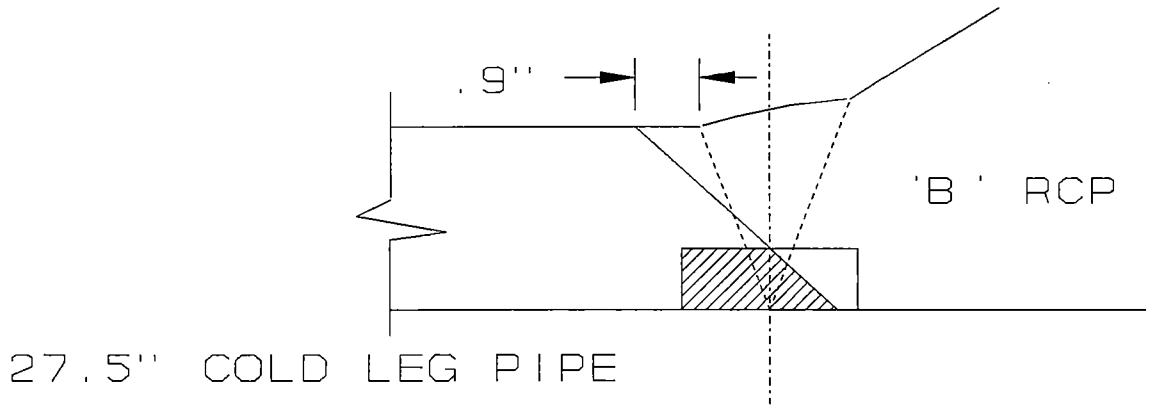
8 - Circumferential scan, counterclockwise

Steam Generator "A" 1994 Examined 284" - 0"

Steam Generator "B" 1988 Examined 142" - 284"

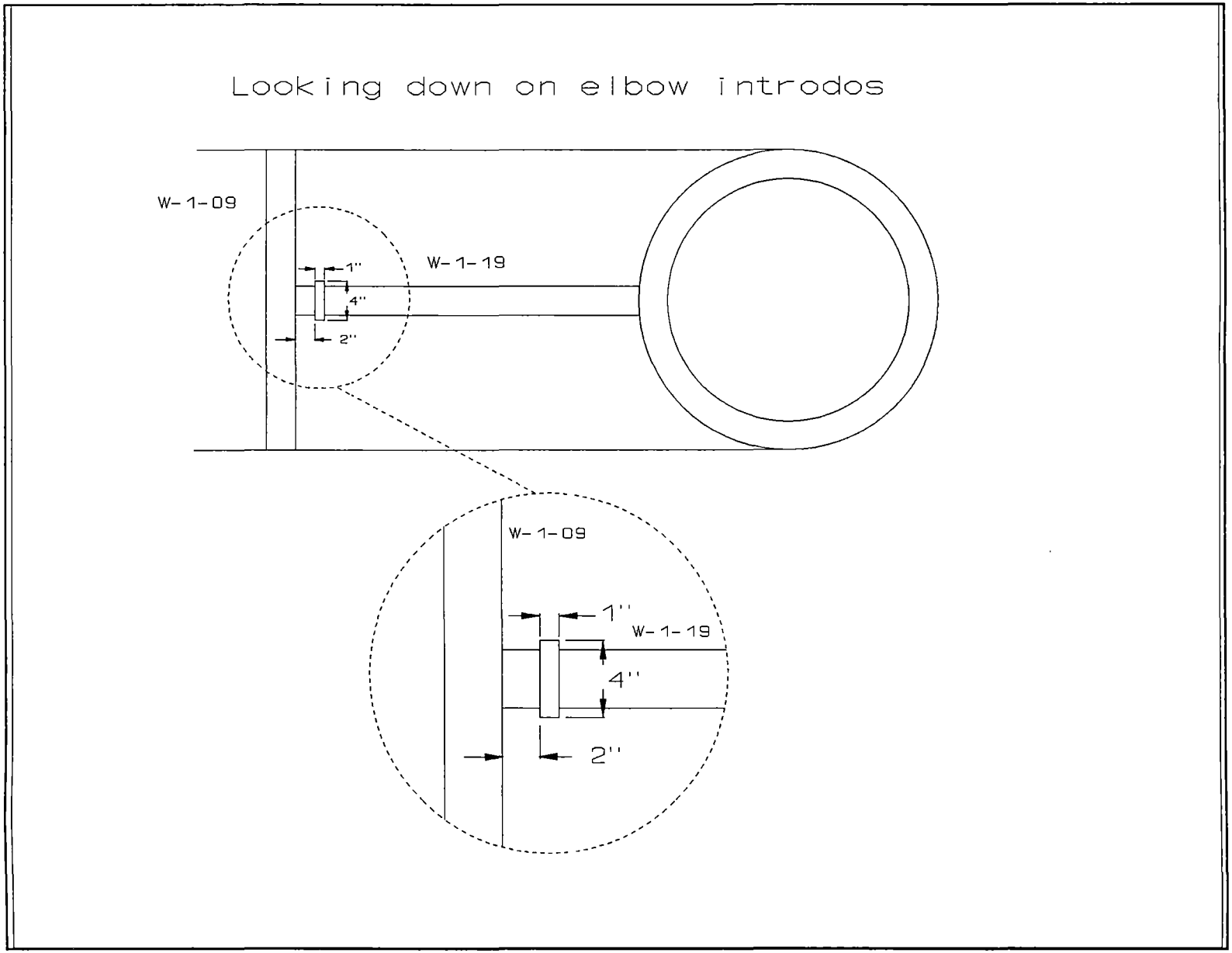
Steam generator "C" 1986 Examined 0" - 142"

Weld 1-12 on line 27½"-RC-6-2501R



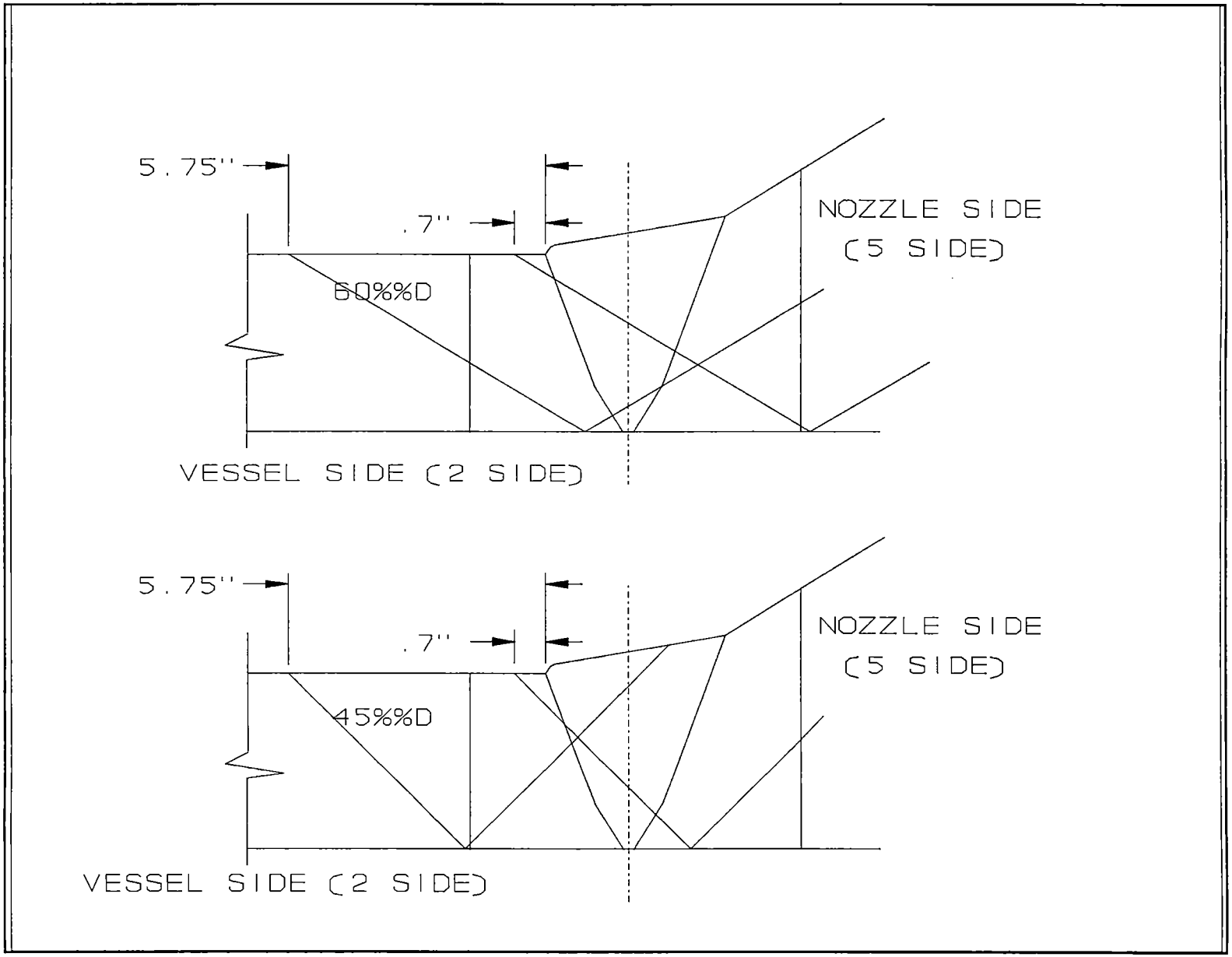
Sketch 1

Weld 1-19 on line 31"-RC-8-2501R



Sketch 2

Steam Generator Weld 2-09



Sketch 3