Southern Nuclear
Operating Company, Inc.
40 Inverness Center Parkway
Post Office Box 1295
Birmingham, Alabama 35201-1295

Tel 205.992.5000

SOUTHERN COMPANY
Energy to Serve Your World℠

December 19, 2008

Docket No.: 50-321

NL-08-1781

U. S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, D. C. 20555-0001

Edwin I. Hatch Nuclear Plant – Unit 1
Certified Material Test Report (CMTR) for CRD System Return Nozzle (N-9) Cap

Ladies and Gentlemen:

On February 26, 2008 Southern Nuclear Operating Company (SNC) requested an alternative pursuant to 10 CFR 50.55a(a)(3)(i) to perform a dissimilar metal full structural weld overlay on weld 1C11-1CRD-3-R-18A. This alternative was subsequently granted.

During a related telephone conversation, the NRC requested a copy of the CMTR for CRD system return nozzle (N-9) cap, and it is hereby included in the enclosure to this letter.

This letter contains no NRC commitments. If you have any questions, please advise.

Sincerely,

M. J. Ajluni
Manager, Nuclear Licensing

MJA/MNW/daj

Enclosure: Certified Material Test Report (CMTR) for CRD System Return Nozzle (N-9) Cap

cc: Southern Nuclear Operating Company
Mr. J. T. Gasser, Executive Vice President
Mr. D. R. Madison, Vice President – Hatch
Mr. D. H. Jones, Vice President – Engineering
RTYPE: CHA02.004

U. S. Nuclear Regulatory Commission
Mr. L. A. Reyes, Regional Administrator
Mr. R. E. Martin, NRR Project Manager – Hatch
Mr. J. A. Hickey, Senior Resident Inspector – Hatch

Edwin I. Hatch Nuclear Plant – Unit 1

Enclosure

Certified Material Test Report (CMTR) for
CRD System Return Nozzle (N-9) Cap

C O N T E N T S

Q.A. RECORDS FOR : HATCH 1
EQUIP : FORGINGS
MPL NO. B11-A001
S/N AJ403-01-02 ITEM 1
G.E. P.O. NO. 205 AJ 403 Rev. 04
SUPPLIER : COULTER STEEL & FORGE COMPANY

1. COULTER STEEL & FORGE COMPANY CERTIFICATE
2. INCO MATERIAL CERTIFICATE
3. CONAM ULTRASONIC INSPECTION CERTIFICATE
4. CONAM LIQUID PENETRANT INSPECTION CERTIFICATE
5. COULTER STEEL & FORGE COMPANY HEAT TREAT CHARTS
6. P.Q.C. NO. S 903

322

3-1-77
4-1-77

1-17-78
Reviewed By: Date
M. J. Ross, Quality Control Records Specialist
General Electric Co. - BWR Projects Dept.

R.K. Longerbeam 3/6/78
Reviewed By: Date:
R. K. Longerbeam, Quality Control Engineer
General Electric Co. - BWR Projects Dept.

38742

COULTER STEEL & FORGE COMPANY

1484 - 67TH STREET, EMERYVILLE, CALIFORNIA 94608
415-653-2512 TELEX 33-8408 TWX 910-366-7293

1228 RIO VISTA AVENUE, LOS ANGELES, CALIF. 90023, TELEX 67-7340, PHONE 213-261-6115
334 WEST 8TH SOUTH, SALT LAKE CITY, UTAH 84101, TELEX 38-5330, PHONE 801-322-3533
2715-6TH AVENUE SOUTH, SEATTLE, WASH. 98134, WESTERN UNION FAX, PHONE 206-622-6066

GENERAL ELECTRIC COMPANY 652164
NED
175 Curtner Avenue
San Jose, California 95125
ATTN: ACCOUNTS PAYABLE

CUSTOMER'S ORDER NO.: 205-AJ403 REV. 04
ORDER DATE: 76 DEC 16

SAVANNAH AIRPORT
HATCH 1
GEORGIA POWER COMPANY
Edwin I Hatch Nuclear Plant
U.S. Highway 1
Baxley, Georgia 31513

INVOICE DATE
INV [4] SPECIAL CLAUSES
TAXABLE NO [X] YES
CALL [X] OUR TRUCK
PREPAY COLLECT [X]
VIA T
DATE SHIPPED 4/4/77
PARTIAL COMPLETE

ITEM NO.	QUANTITY ORD.	QUANTITY SHIP	DESCRIPTION	
			Forged & Rough Machined, 250 RMS or better, Ni-Cr-Fe Alloy, (Inconel 600)forging per Proc. CSF-PP--025,Rev 0(17 DEC '76), Annealed per Heat Treat Proc. CSF-HT-005,Rev 0(28 SEPT. '76), Testing per TSP #869,Rev 1(22 DEC '76); in accord with G.E. Spec. B50YP169A1,Rev 0. Ultrasonic inspected in accord with NB-2542 & Proc. CSF-UT-007,Rev 0 (25 FEB '76). Liquid Penetrant inspected in accord with NB-2546 & Proc. LPI 41001, Rev 18 (20 FEB '76) & E5DYP4, Rev 3. ASME Boiler & Pressure Vessel CODE Sections II & III, Class 1, 1974 Edition including all Addenda thru Winter 1975 applies.	
1	1	/	PC: P/N 137C5632 P1	17
			S/N AJ403-01-02	

MARKING AND PACKAGING REQUIREMENTS
Packaging & Marking proc. CSF PM-009, Rev 2(19 JAN '77)

MET. REPORT REQUIREMENTS [2] MAIL TO:
J.G. Jorgenson-Buyer
M/C 703

NOTARIZE		W/SHIP.	4
CHEM. ONLY		W/B. LAD.	1

METALLURGICAL [illegible]

Item No.	Heat No. or Ident.	C.	Mn.	P.	S.	Si.	Cr.	Ni.	Co.	Cu.
	NX8508	.07	.18		.002	.19	15.26	75.6[illegible]		
							Fe 8.40			
S/N AJ403-01-02										
GRAIN SIZES	L/N 6049-2	GS 35 #1-0, 30 #2, 20 #3-4, 15 #8,							Hardness Rb 9[illegible]	
Check ANALYSIS	L/N 6023	C .093	Mn .23	P .004	S .006	Si .24	Cr 15.58	Ni 75.58	Co .05	Cu .18
							Mg .001	B .003	Ti .16	Al .18

Item No.	Hardness of Material Supplied	Tensile	Yield .2% Offset	El.	R.A.	BHN.	Size of Raw Stock	
	L/N 6023	89,300	43,300	45	60.2	163	6"SQ	INCO

Heat Treat Charts attached.

Ultrasonic & Penetrant Inspection Satisfactory. Con[illegible] Inspection Inc, Certifications attached. Their Job. No.'s C-1915 and C-1934

METHOD OF MATERIAL MARKING: Stencil with Low Sulfur and Halogen Ink on OD: General Electric, 137C5632P1, Part No. 1, S/N AJ403-01-02, YR BUILT 197[illegible]
DES. PRES 1250 Psi at 575 F.

ASME QUALITY SYSTEM CERTIFICATE (MATERIALS)
NUMBER-N-1189
EXPIRATION DATE OF CERTIFICATE 8-4-78

We certify that the material described herein [illegible] inspected and/or tested for conformance to the [illegible] specifications. Our warranty of quality provides for [illegible] ment only of any part of this material which [illegible] inspection, test or use shows non-conformance [illegible] specification. Inspection records, certifications, and/or physical test reports are on file for your [illegible] tion at EMERYVILLE, CALIFORNIA.

COULTER STEEL & FORGE COMP[illegible]

By [signature]

Title MGR. QUALITY CONTROL

HUNTINGTON ALLOYS, INC.
HUNTINGTON, WEST VIRGINIA 25720

CHARGE ORDER NO.	MARK ORDER NO.	DATE
E03047	D-54544	04/00/76
D-54544		

FUTURE SHIPMENT

ITEMS	QUANTITY	DESCRIPTION OF MATERIAL SHIPPED
1	20314 LB	INCONEL ALLOY 600 HOT FIN FRG RUAL SQ ROUGH GRD 0.0000 SQ X RDM MARK ITEM 360-050-20
SPECIFICATION		SAE AMS-5665H ASME SB-166 SECTION 2 PART B 1974 EDITION ALL ADDENDA THROUGH SUMMER 1975 MARKING WAIVED INCO 328 REV B

QUALITY CONTROL DEPARTMENT

VISUAL AND DIMENSIONAL EXAMINATION - OK

CHARGE
ATTN OFF MGR
A M CASTLE & CO
1900 THIRD ST
SAN FRANCISCO CAL 94107

SHIP
A M CASTLE & CO
1900 THIRD ST
SAN FRANCISCO CAL 94107

CHEMICAL ANALYSIS

HEAT #(4)	C	MN	FE	S	SI	CU	NI(1)	CR
NX8485	0.07	0.21	9.18	.002	0.23	0.36	75.05	14.90
NX8508	0.07	0.18	8.40	.002	0.19	0.30	75.60	15.26

HEAT	INGOT	PC	LOT	PCS SHIPPED
NX8485	3	1,2,3	F1840	3
NX8485	4	1,2,3	F1841	3
NX8508	3	1-1,1-2,3	F1842	3
NX8508	4	1,2,3	F1843	3

REPORT OF ULTRASONIC INSPECTION

NUCLEAR ENERGY SERVICES, INC.
CONAM INSPECTION DIVISION

660 SOUTH 31ST STREET • RICHMOND, CALIFORNIA 94804 • TELEPHONE: (415) 233-0666

COULTER STEEL & FORGE COMPANY

1494 - 67th Street

Emeryville, California

DATE 8 February 1977

CUSTOMER P.O.# 38742

CONTRACTOR P.O.# 205 AJ403, Rev. 04

TEST DATA

☒ STRAIGHT BEAM ☒ ANGLE BEAM 45 DEGREES

SPECIFICATION: ASME B & PV CODE Sec. II & III (74) Class 1 & Addenda thru Winter 1975 SA-388, Para. NB-2542, Procedure CSF-UT-007, Rev. 0 (23 Feb. 1976).

	REFERENCE TEST STANDARD	REFERENCE TEST STANDARD
DEPTH	B.R.	.020"
SIZE	75% FSH (14DB)	60°ID & OD V Notch
ALLOY	INCO 600	INCO 600
PAC	0%	0%

	SEARCH UNIT	SEARCH UNIT
S/N MAKE	24781 A/I	24781 A/I
EFFECTIVE BEAM DIA.	.75"	.75"
LATERAL INDEX	.5"	.5"
FREQUENCY	1 MHz	1 MHz
MATERIAL	SIJ	SIJ
SIZE/SHAPE	1.0" RD	1.0" RD

INSTRUMENT

MAKE	Sperry	COUPLANT	Water
MODEL	UM 721	METHOD	Immersion
S/N	2229-7	SENSITIVITY	75 % FULL SCREEN HEIGHT
TEST FREQUENCY	1 MHz		

INVOICE REPORT NUMBER	JOB NUMBER	INSPECTOR
22497	C-1915	David Lee, Level II

ITEM	QUAN	PART NUMBER	ALLOY	DESCRIPTION	ACCEPTED	REJECTED
1	1	137C5632P1		End Cap Forgings Item No. 1 5.41" Major OD, 6.22" Major Length S/N AJ403-01-02 Heat No. EX8508 Surface Finish: 250 RMS Alloy: Inconel 600	1	0

* CAUSE FOR REJECTION OR REMARKS

REPORTABLE INDICATIONS FOUND None

REJECTABLE INDICATIONS FOUND None

CERTIFIED BY Gary Loyd, G.E. lt

CERTIFIED BY David Lee

WE HEREBY CERTIFY THE PARTS SHOWN HEREIN TESTED IN CONFORMANCE WITH THE SPECIFICATION NOTED AND THAT WE ARE IN COMPLIANCE WITH THE PROVISIONS OF THE MERCURY CONTAMINATION CLAUSE. PARTS AND MATERIALS HAVE NOT BEEN SUBJECT TO MERCURY OR MERCURY CONTAMINANTS. THIS REPORT REPRESENTS CONAM INSPECTION INTERPRETATION OF THE RESULTS OBTAINED FROM THE TEST AND IS NOT TO BE CONSTRUED AS A GUARANTY OR WARRANTY OF THE CONDITION OF THE MATERIALS TESTED. CONAM INSPECTION SHALL NOT BE HELD LIABLE FOR MISINTERPRETATION OF CONDITIONS, LOSS, DAMAGE, INJURY OR DEATH ARISING FROM OR ATTRIBUTABLE TO ANY PRACTICE, ACTION OR OMISSION IN CONNECTION WITH THE USE OF THIS REPORT.

NUCLEAR ENERGY SERVICES, INC.
CONAM INSPECTION DIVISION

660 SOUTH 31ST STREET • RICHMOND, CALIFORNIA 94804 • TELEPHONE: (415) 233-6660

COULTER STEEL & FORGE COMPANY
1494 - 67th Street
Emeryville, California

DATE 15 February 1977
CUSTOMER P.O. 38742
CONTRACTOR P.O. 205 AJ403, Rev. 04

INSPECTION METHOD

☒ PENETRANT
☐ MAGNETIC PARTICLE
☐ EDDY CURRENT

SPECIFICATION

ASME B & PV CODE Sec. II & III (74)
Class 1 & Addenda thru Winter 1975
Para. NB-2546, Procedure LPI-41001,
Rev. 18 (20 February 1976).

TEST DATA

PENETRANT MATERIALS

	PENETRANT	DEVELOPER	REMOVER	CLEANER
TYPE	Tracer-Tech P133		Water	Acetone
BATCH #	U-310			Lot #0398
SULFER CONTENT	0.006%			.1PPM
HALOGEN CONTENT	0.009%			.1PPM

INVOICE/REPORT NUMBER	JOB NUMBER	INSPECTOR
22497	C-1934	David Lee, Level II

ITEM	QUAN	PART NUMBER	ALLOY	DESCRIPTION	ACCEPTED	REJECTED
1	1	137C5632P1		End Cap Forgings Item No. 1 5.41" Major OD, 6.22" Major Length S/N AJ403-01-02 Heat No. NX8508 Surface Finish: 250 RMS Alloy: Inconel 600	1	0

BWRPD-QC 3-18-77

*CAUSE FOR REJECTION OR REMARKS

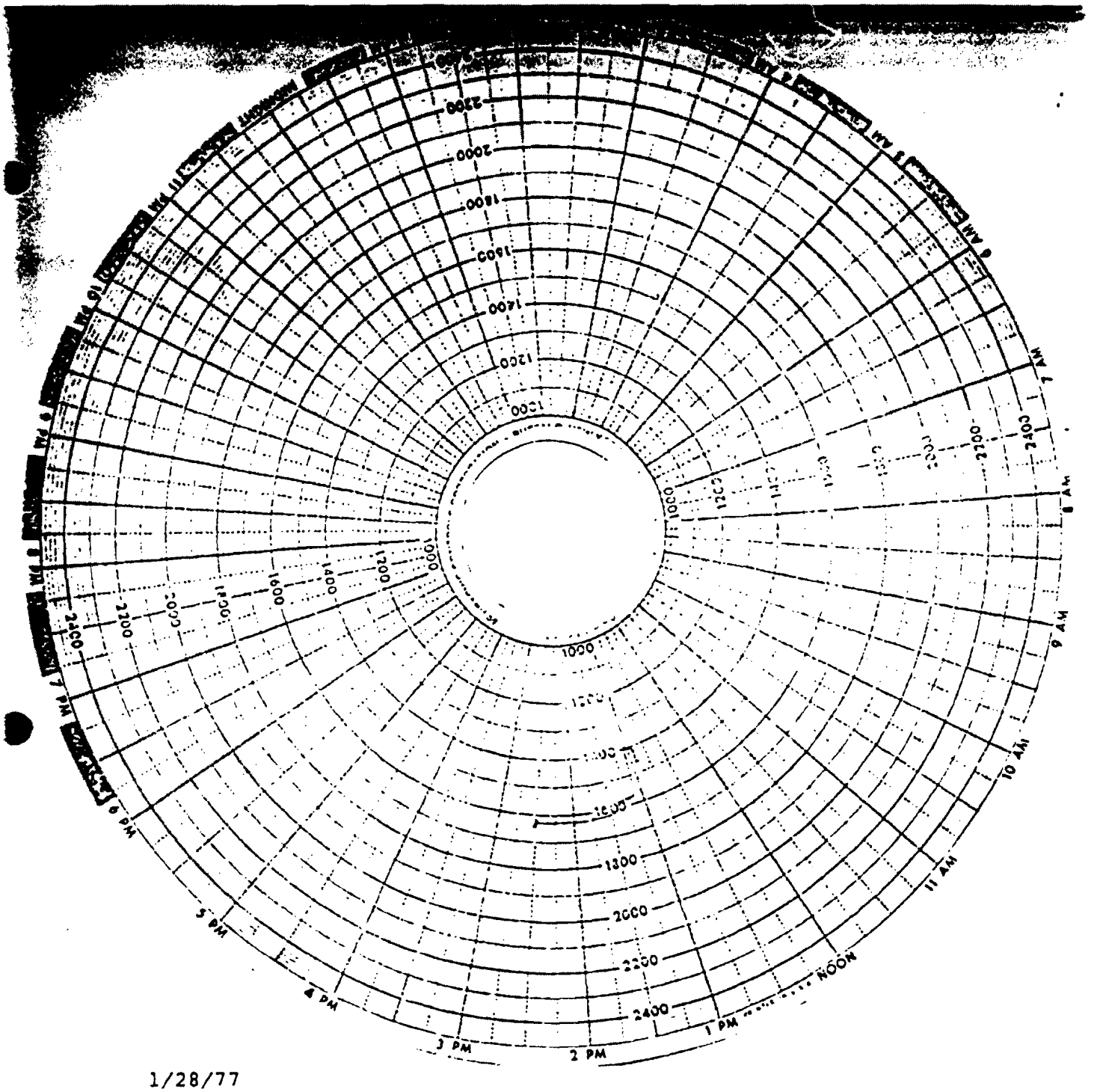
Parts were inspected and evaluated in accordance with LPI-41001, Rev. 18.
No rejectable indications were found.

APPROVED BY

lt

CERTIFIED BY David G. Lee

WE HEREBY CERTIFY THE PARTS LISTED HAVE BEEN TESTED IN CONFORMANCE WITH THE SPECIFICATION NOTED AND THAT WE ARE IN COMPLIANCE WITH THE PROVISIONS OF THE MERCURY CONTAMINATION CLAUSE. PARTS AND MATERIALS HAVE NOT BEEN SUBJECT TO MERCURY OR MERCURY CONTAMINATIS. THIS REPORT REPRESENTS CONAM INSPECTION INTERPRETATION OF THE RESULTS OBTAINED FROM THE TEST AND IS NOT TO BE CONSTRUED AS A GUARANTEE OR WARRANTY OF THE CONDITION OF THE MATERIALS TESTED. CONAM INSPECTION SHALL NOT BE HELD LIABLE FOR [illegible]



1/28/77
General Electric Company
P.O.# 205 AJ 403 Rev. 04
CSF Lot No. 38742
Material: Inconel 600
HT TRT LOT # 38788A
HT # NX 8508
HT: Anneal 1625°F ±25°F, 1 Hr., A.C.
Furnace No. 7
Operator: Kevin/Don
Shift: Days

GENERAL ELECTRIC

PQC NO. S 903

NUCLEAR ENERGY DIVISION

PRODUCT QUALITY CERTIFICATION

CUSTOMER/PROJECT		PRODUCT NAME	MPL NO.
HATCH I		FORGING	B11-A001
G. E. PURCHASE ORDER NO.	REV	PURCHASE ORDER ITEM(S) NO.	QUANTITY
205 AJ403	4	1	1

SUPPLIER'S CERTIFICATION

THIS IS TO CERTIFY THAT THE PRODUCTS IDENTIFIED HEREIN HAVE BEEN MANUFACTURED UNDER A CONTROLLED QUALITY ASSURANCE PROGRAM AND ARE IN CONFORMANCE WITH THE PROCUREMENT QUALITY REQUIREMENTS INCLUDING APPLICABLE CODES, STANDARDS AND SPECIFICATIONS AS IDENTIFIED IN THE ABOVE-REFERENCED DOCUMENTS; UNLESS NOTED BELOW. ANY SUPPORTING DOCUMENTATION WILL BE FORWARDED OR RETAINED IN ACCORDANCE WITH PURCHASE ORDER REQUIREMENTS.

SIGNED: Charles B. Fagan DATE: MAY 16 1977

TITLE: Quality Control Manager ORGANIZATION: Coulter Steel & Forge Co.

GE QUALITY ASSURANCE CERTIFICATION

THIS IS TO CERTIFY THAT EVIDENCE SUPPORTING THE ABOVE SUPPLIER'S CERTIFICATION STATEMENT HAS BEEN REVIEWED AND NO PRODUCT NONCOMFORMANCES FROM PROCUREMENT QUALITY REQUIREMENTS HAVE BEEN FOUND UNLESS NOTED BELOW.

SIGNED: J J Fitzpatrick DATE: May 16 1977

TITLE: GE QA REPRESENTATIVE ORGANIZATION: BWRPD

NONCONFORMANCES FROM PROCUREMENT QUALITY REQUIREMENTS.

REMARKS/EQUIPMENT SERIAL NUMBERS:

S/N AJ403-01-02

This PQC changed because of clerical error, original equipment shipped 3/18/77.