

B3

DuBose Steel, Inc.

P.O. Box 1008 • Roseboro, N.C. 28782 • 919-625-4181

October 25, 1989

US Nuclear Regulatory Commission
Attn: Ed Baker
Mail Stop 9D4
Washington, DC 20555

Dear Sir;

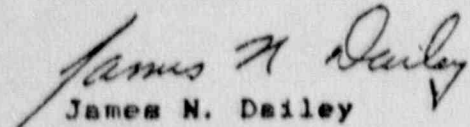
Attached is a copy of a notification which was received by
DuBose Steel, Inc from Meredith Corp./PVN Steels.

Our quality program only requires that we maintain records
for five years from the date of the customer order. We have
made an extensive search of other records which go back to
about the time frame of this material and were not able to
determine who received this material.

The disposition of files was made to the customers and the
records saved but they only identified the purchase order
number from the customer.

We wish we could be of greater help in location this
material.

Sincerely


James N. Dailey
QA Manager

Copy: Charles H. DuBose Jr.



July 17th, 1989

Mr. James Dailey
Quality Assurance Manager
Dubose Steel Company
Highway 24 West
Roseboro, NC 28382

Dear Mr. Dailey:

We have recently learned that one bar of A-SA-193 Grade B7 (AISI 4140 - quenched, tempered and stress-relieved), size 1-3/4" Round x 24'0" long, Heat #58783, Trace Heat Code: HJK, Stress Charge #85-737, supplied by Copperweld Steel Company (CSC) in September 1981, contains a potential defect. This is to inform you that Dubose Steel Company purchased 2 pieces of this material, 24'0" long, from PVN Steels by your Purchase Order No. 6198-61, dated 11/3/81 (PVN Steels Sales Order No. 5886, shipped on 11/18/81).

Enclosed please find a notice sent today to the U.S. Nuclear Regulatory Commission concerning this matter.

We have informed CSC of your purchase, and we assume that they will contact you concerning the need, if any, for testing, examination, or other action. If PVN Steels can be of any assistance, however, please do not hesitate to contact me.

Sincerely yours,

MEREDITH CORP./PVN STEELS

Hamilton Vazquez (if)
Hamilton Vazquez
Vice President-Quality Assurance

cc: Mr. Thomas E. Murley
Director, Office of Nuclear Reactor Regulation
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Mr. James Bastista
Plant Manager
Copperweld Steel Company
4000 Mahoning Avenue
Warren, Ohio 44483



July 17th, 1989

Mr. Thomas E. Murley
Director, Office of Nuclear Reactor Regulation
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Dear Mr. Murley:

Pursuant to 10 CFR Part 21, I wish to inform you of certain information which may indicate the existence of a defect affecting a basic component supplied for a facility subject to NRC licensing requirements. The following information is provided pursuant to 10 CFR 21.21:

(i) Reporting Individual

William M. Lanza
President
Meredith Corporation/Pressure Vessel-Nuclear Steels
(PVN Steels)
460 Hillside Avenue
Hillside, New Jersey 07205
(201) 964-5300

(ii) Basic Component Which Contains a Defect

A-SA-193 Grade B7 (AISI 4140 - Quenched, tempered and stress-relieved)
Size: 1-3/4" Round
Heat Number: 58783
Trace Heat Code: HJK
Stress Charge #: 8B-737

(iii) Manufacturing/Supplying Company

Copperweld Steel Co. (CSC)
4000 Mahoning Avenue
Warren, Ohio 44483

Purchased by: Pressure Vessel-Nuclear Steels, Inc.
460 Hillside Avenue
Hillside, New Jersey 07205
Purchase Order: No. 5795
Copperweld Steel S/O 80294
Date of Shipment: September 4, 1981

(iv) Nature of Defect

Quench cracks were found in one bar of the material identified in item (ii), which was purchased by Louisiana Power & Light Company (LP&L) on February 24, 1982 - P. O. #WP3-8068. See item (vi).

Upon examination by CSC, a sample of the material showed a visible crack of 5/8" deep on one end face of the bar. According to CSC, magnaflux examination of the provided samples revealed that cracks were only present on one end of the remaining bar stock at the LP&L warehouse. According to CSC, micro-examination of the crack revealed a 5/8" deep crack with scale, no oxides and no decarburization. See attachments A and B.

(v) Date Information Was Obtained

LP&L informed PVN Steels of a potential defect in one bar of the material identified in item (ii) on June 2, 1989. Following a meeting on June 5, 1989 between representatives of LP&L and PVN Steels, PVN Steels asked for samples of the material and same were sent by LP&L directly to CSC on June 8, 1989 for testing and analysis. Samples were sent to George Basil of CSC and were processed under CSC Investigation #89-76. Subsequently, PVN Steels received the attached letters from CPS. See attachments A and B.

(vi) Location of Component

PVN Steels has ascertained that on February 23rd, 1981, it purchased 17 bars of the material identified in item (ii) from CSC. Ten (10) bars of the material were supplied to LP&L, Killona, Louisiana 70066, for use in the construction of the Waterford Plant Unit #3: 8 bars - 24'0" long and 1 bar - 19' 1/2" long, per Purchase Order WP3-8068, dated 2/22/82; and 1 bar 5' 0" long per Purchase Order WP3-7628 dated 1/13/82. To our knowledge, one bar of the material is now located in the LP&L warehouse in Killona, Louisiana, except for samples which are in the possession of CSC. To the best of PVN's knowledge, to date none of the other nine bars provided to LP&L has been tested or shown to have a defect.

The following list shows where PVN Steel shipped the material identified in item (ii) which PVN Steels obtained in 1981:

<u>CUSTOMER</u>	<u>CUSTOMER P.O. #</u>	<u>P.O. DATE</u>	<u>PVN S/O</u>	<u>DATE OF SHIPMENT</u>	<u>SHIPPED TO</u>	<u>QUANTITY</u>
LP&L	WP3-7628	1/13/82	0007	1/27/82	Waterford Unit # 3 Killona, LA	1 pc. 5' long*
LP&L	WP3-8068	2/22/82	0213	3/05/82	Waterford Unit # 3 Killona, LA	8 pcs. 24' long* 1 pc. 19' 1-1/2"*
Pepco	N1482	11/21/81	6045	12/22/81	151 Helen St. S. Plainfield, NJ	1 pc. 24' long
Pepco	N1540	2/11/82	0126	2/22/82	151 Helen St. S. Plainfield, NJ	2 pcs. 24' long
South Carolina Electric & Gas	0300435	1/13/82	0009	1/29/82	VC Summer Stn. Jenkinsville, SC	3 pcs. 24' long
Dubose Steel	6198-61	11/03/81	5886	11/18/81	Roseboro, NC	2 pcs. 24' long
TOTAL:						17 pcs. 24' long

(*) 1 pc. 24'0" long was cut to supply S/O 0213 & 0007 both for LP&L.

(vii) Corrective Action

To date, to PVN's knowledge only one of the 9 bars supplied to LP&L has been tested and shown to have a defect. On July 12th, 1989, PVN Steels communicated to LP&L the results of the CSC analyses as stated in item (iv). In addition, on July 17th, PVN Steels informed the other listed purchasers of the potential defect by letter (See attachments C, D, E and F) and also informed CSC of the identities of the PVN purchasers. See attachment G. PVN Steels is also in communication with LP&L and CSC concerning continuing efforts to determine what corrective actions may be necessary and to undertake them as required.

(vii) Advise to Purchasers or Licensees

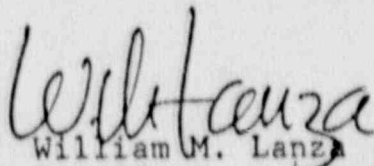
See item (vii).

To the extent that PVN Steels obtains information in the future which renders necessary advice in addition to that already provided, PVN Steels will provide it promptly.

We will keep you advised as additional information on this matter becomes available. If you have any questions, please contact me.

Sincerely yours,

MEREDITH CORP./PVN STEELS


William M. Lanza
President

WML:imf

cc: Mr. James Batsista
Plant Manager
Copperweld Steel Company
4000 Mahoning Avenue
Warren, OH 44483

Mr. W. E. Day
Supervisor TC&R-Event Analysis Reporting & Response
Louisiana Power & Light
Waterford 3 SES
P. O. Box B
Killona, LA 70066-0751

Mr. Fred Menkens
President
Pepco
151 Helen Street
South Plainfield, NJ 07080

Mr. F. J. Leach
Manager, Quality Assurance
South Carolina Electric & Gas
P. O. Box 764
Columbia, SC 29218

Mr. James Dailey
Quality Assurance Manager
Dubose Steel
Highway 24 West
Roseboro, NC 28382



June 26, 1989

Pressure Vessel-Nuclear Steels Inc.
460 Hillside Ave.
Hillside, New Jersey 07205

Attn: Hamilton Vazquez

Re: LPL Memo of 6/7/89 from W.E. Day
CSC Investigation No. 89-76

Dear Hamilton:

On 6/9/89, CSC received two bar lengths, approximately 11-1/2", for investigation of cracks. These samples were reported to be from S.O. 80294, P.O. 5795, HR QT MS SR PO H/CL, Heat 58783, 1-3/4" round material.

Visual examination showed that sample #1 had a visible crack defect 5/8" deep on one end face and was stamped: HV-89-1, HV-6/5/89. Sample #2 had no visible defects and was stamped: HUK, 58783, Ht. D86072, HV-89-1.

Macro-etch examination showed the following:

- #1 - one end had a crack defect and the other end had no crack defect.
- #2 - neither end had any surface defects.

Chemical analyses of the samples showed:

	<u>C</u>	<u>Mn</u>	<u>P</u>	<u>S</u>	<u>Si</u>	<u>Ni</u>	<u>Cr</u>	<u>Mo</u>	<u>Cu</u>
Sample #1	.43	.99	.009	.026	.25	.20	.98	.15	.10
Sample #2	.43	.97	.010	.026	.25	.20	.96	.15	.11
Ht. 58783	.42	.97	.012	.027	.27	.20	1.00	.16	.11

The samples are both a 4140 grade.

Magnaflux examination of the samples revealed that #1 had a crack 1/2 of the 11-1/2" length and #2 had no surface defects.

Micro-examination of the crack defect revealed a 5/8" deep crack with scale, no oxides and no decarburization associated. The micro-structure was a normal heat treated structure of tempered martensite.

If you have any questions, let me know. Please provide above data to LPL as they requested.

Very truly yours,
Charles L. Davis /cp
Charles L. Davis
Regional Metallurgist

clp

cc: J. Basista, G. Basile, J. Pizor, E. Thomas
4000 Mahoning Avenue • Warren, Ohio 44483 • 216-841-6011

COPPERWELD STEEL COMPANY
4000 Mahoning Avenue
Warren, OH 44483

(216) 841-6875 (Direct Line to Facsimile)

We are transmitting 2 pages including this coversheet.

TO: HAMILTON VAZQUEZ
PRESSURE VESSEL NUCLEAR

FROM: CHUCK DAVIS

If any problems arise or to verify, please call (216) 841-6874.



June 26, 1989

Pressure Vessel-Nuclear Steels Inc.
460 Hillside Ave.
Hillside, New Jersey 07205

Attn: Hamilton Vazquez

Re: LPL Memo of 6/7/89 from W.E. Day
CSC Investigation No. 89-76

Dear Hamilton:

On 6/9/89, CSC received two bar lengths, approximately 11-1/2", for investigation of cracks. These samples were reported to be from S.O. 20294, P.O. 5795, HR QT MS SR PO H/CL, Heat 58783, 1-3/4" round material.

Visual examination showed that sample #1 had a visible crack defect 5/8" deep on one end face and was stamped: HV-89-1, HV-6/5/89. Sample #2 had no visible defects and was stamped: HUK, 58783, Ht. DB6072, HV-89-1.

Macro-etch examination showed the following:

- #1 - one end had a crack defect and the other end had no crack defect.
- #2 - neither end had any surface defects.

Chemical analyses of the samples showed:

	<u>C</u>	<u>Mn</u>	<u>P</u>	<u>S</u>	<u>Si</u>	<u>Ni</u>	<u>Cr</u>	<u>Mo</u>	<u>Cu</u>
Sample #1	.43	.99	.009	.026	.25	.20	.98	.15	.10
Sample #2	.43	.97	.010	.026	.25	.20	.96	.15	.11
Ht. 58783	.42	.97	.012	.022	.27	.20	1.00	.16	.11

The samples are both a 4140 grade and appear to be from Heat 58783.

Magnaflux examination of the samples revealed that #1 had a crack 1/2 of the 11-1/2" length and #2 had no surface defects.

Micro-examination of the crack defect revealed a 5/8" deep crack with scale, no oxides and no decarburization associated. The micro-structure was a normal heat treated structure of tempered martensite.

If you have any questions, let me know. Please provide above data to LPL as they requested.

Very truly yours,

Charles L. Davis /cp
Charles L. Davis
Regional Metallurgist

clp

cc: J. Basista, C. Basile, J. Pizar, E. Thomas
4000 Mahoning Avenue • Warren, Ohio 44483 • 216.841.6011



ATTACHMENT "C"

July 17th, 1989

Mr. W. E. Day
Supervisor TC&R-Event Analysis Reporting and Response
Louisiana Power & Light
Waterford 3 SES
P. O. Box B
Killona, LA 70066-0751

Dear Mr. Day:

Enclosed please find a copy of the notice sent today to the U.S. Nuclear Regulatory Commission, pursuant to 10 C.F.R. Part 21, concerning the A-SA-193 Grade B7 (AISI 4140 - quenched, tempered and stress-relieved) material, 1-3/4" Round x 24'0" long, Heat #58783, Trace Heat Code: HJK, Stress Charge #8B-737, supplied by Copperweld Steel Company (CSC) to PVN Steels in 1981.

As we have discussed, we have determined that Louisiana Power & Light (LP&L) received such material as follows:

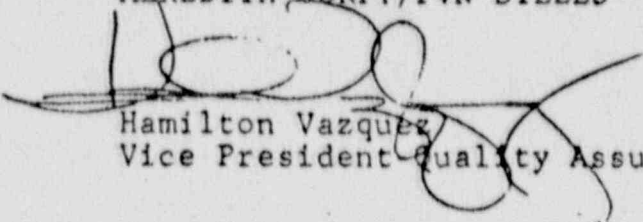
<u>PVN S/O</u>	<u>DATE</u>	<u>SHIPPED TO</u>	<u>LP&L S/O</u>	<u>QUANTITY</u>
0213	2/22/82	Waterford Unit #3 Killona, LA	WP-3-8068	8 pcs. 24' long 1 pc. 19- $\frac{1}{2}$ "
0007	1/13/82	Waterford	WP-3-7628	1 pc. 5' long

Please note that one piece 24'0" long was cut to supply both sales orders 0213 and 0007.

We have informed CSC of your purchases, and we assume that they will contact you directly concerning the need, if any, for testing, examination, or other action. If PVN Steels can be of any assistance, however, please do not hesitate to contact me.

Sincerely yours,

MEREDITH CORP./PVN STEELS


Hamilton Vazquez
Vice President Quality Assurance

Page 2
Mr. W. E. Day
July 17th, 1989

ATTACHMENT "C"

cc: Mr. Thomas E. Murley
Director, Office of Nuclear Reactor Regulation
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Mr. James Battista
Plant Manager
Copperweld Steel Company
4000 Mahoning Avenue
Warren, Ohio 44483



ATTACHMENT "D"

July 17th, 1989

Mr. Fred Menkens
President
Pepco
151 Helen Street
South Plainfield, NJ 07080

Dear Mr. Menkens:

We have recently learned that one bar of A-SA-193 Grade B7 (AISI 4140 - quenched, tempered and stress-relieved), size 1-3/4" Round x 24'0" long, Heat #58783, Trace Heat Code: HJK, Stress Charge #85-737, supplied by Copperweld Steel Company (CSC) in September 1981, contains a potential defect. This is to inform you that Pepco purchased 3 pieces of this material, 24'0" long, from PVN Steels by your Purchase Orders Nos. N1482 and N1540, dated 11/21/81 and 2/11/82 (PVN Steels Sales Orders Nos. 6045 and 0126, shipped on 12/22/81 and 2/22/82).

Enclosed please find a notice sent today to the U.S. Nuclear Regulatory Commission concerning this matter.

We have informed CSC of your purchase, and we assume that they will contact you concerning the need, if any, for testing, examination, or other action. If PVN Steels can be of any assistance, however, please do not hesitate to contact me.

Sincerely yours,

MEREDITH CORP./PVN STEELS

Hamilton Vazquez (if)
Hamilton Vazquez
Vice President-Quality Assurance

cc: Mr. Thomas E. Murley
Director, Office of Nuclear Reactor Regulation
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Mr. James Bastista
Plant Manager
Copperweld Steel Company
4000 Mahoning Avenue
Warren, Ohio 44483



July 17th, 1989

Mr. F. J. Leach
Manager, Quality Assurance
South Carolina Electric & Gas
P. O. Box 764
Columbia, S.C. 29218

Dear Mr. Leach:

We have recently learned that one bar of A-SA-193 Grade B7 (AISI 4140 - quenched, tempered and stress-relieved), size 1-3/4" Round x 24'0" long, Heat #58783, Trace Heat Code: HJK, Stress Charge #85-737, supplied by Copperweld Steel Company (CSC) in September 1981, contains a potential defect. This is to inform you that South Carolina Electric & Gas purchased 3 pieces of this material, 24'0" long, from PVN Steels by your Purchase Order No. Q300435, dated 1/13/82 (PVN Steels Sales Order No. 0009, shipped on 1/29/82).

Enclosed please find a notice sent today to the U.S. Nuclear Regulatory Commission concerning this matter.

We have informed CSC of your purchase, and we assume that they will contact you concerning the need, if any, for testing, examination, or other action. If PVN Steels can be of any assistance, however, please do not hesitate to contact me.

Sincerely yours,

MEREDITH CORP./PVN STEELS

Hamilton Vazquez (if)

Hamilton Vazquez
Vice President-Quality Assurance

cc: Mr. Thomas E. Murley
Director, Office of Nuclear Reactor Regulation
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Mr. James Bastista
Plant Manager
Copperweld Steel Company
4000 Mahoning Avenue
Warren, Ohio 44483



ATTACHMENT "F"

July 17th, 1989

Mr. James Dailey
Quality Assurance Manager
Dubose Steel Company
Highway 24 West
Roseboro, NC 28382

Dear Mr. Dailey:

We have recently learned that one bar of A-SA-193 Grade B7 (AISI 4140 - quenched, tempered and stress-relieved), size 1-3/4" Round x 24'0" long, Heat #58783, Trace Heat Code: HJK, Stress Charge #85-737, supplied by Copperweld Steel Company (CSC) in September 1981, contains a potential defect. This is to inform you that Dubose Steel Company purchased 2 pieces of this material, 24'0" long, from PVN Steels by your Purchase Order No. 6198-61, dated 11/3/81 (PVN Steels Sales Order No. 5886, shipped on 11/18/81).

Enclosed please find a notice sent today to the U.S. Nuclear Regulatory Commission concerning this matter.

We have informed CSC of your purchase, and we assume that they will contact you concerning the need, if any, for testing, examination, or other action. If PVN Steels can be of any assistance, however, please do not hesitate to contact me.

Sincerely yours,

MEREDITH CORP./PVN STEELS

Hamilton Vazquez (if)
Hamilton Vazquez
Vice President-Quality Assurance

cc: Mr. Thomas E. Murley
Director, Office of Nuclear Reactor Regulation
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Mr. James Bastista
Plant Manager
Copperweld Steel Company
4000 Mahoning Avenue
Warren, Ohio 44483



July 17th, 1989

Mr. James Batsista
 Plant Manager
 Copperweld Steel Company
 4000 Mahoning Avenue
 Warren, Ohio 44483

Dear Mr. Batsista,

Enclosed please find a copy of the notice sent today to the U.S. Nuclear Regulatory Commission, pursuant to 10 C.F.R. Part 21, concerning the A-SA-193 Grade B7 (AISI 4140 - quenched, tempered and stress-relieved) material, 1-3/4" Round x 24'0" long, Heat #58783, Trace Heat Code: HJK, Stress Charge #8B-737, supplied by Copperweld Steel Company (CSC) to PVN Steels in 1981.

We have determined that the following purchasers received such material out of the shipment of 17 bars which PVN Steels purchased from CSC (PVN Steels Purchase Order 5795, CSC Sales Order 80294, shipped September 4/19/81):

<u>CUSTOMER</u>	<u>CUSTOMER P.O. #</u>	<u>P.O. DATE</u>	<u>PVN S/O</u>	<u>DATE OF SHIPMENT</u>	<u>SHIPPED TO</u>	<u>QUANTITY</u>
LP&L	WP3-762B	1/13/82	0007	1/27/82	Waterford Unit # 3 Killona, LA	1 pc. 5' long*
LP&L	WP3-806B	2/22/82	0213	3/05/82	Waterford Unit # 3 Killona, LA	8 pcs. 24' long* 1 pc. 19' 1-1/2"*
Pepco	N1482	11/21/81	6045	12/22/81	151 Helen St. S. Plainfield, NJ	1 pc. 24' long
Pepco	N1540	2/11/82	0126	2/22/82	151 Helen St. S. Plainfield, NJ	2 pcs. 24' long
South Carolina Electric & Gas	Q300435	1/13/82	0009	1/29/82	VC Summer Stn. Jenkinsville, SC	3 pcs. 24' long
Dubose Steel	619B-61	11/03/81	5886	11/18/81	Roseboro, NC	2 pcs. 24' long
TOTAL:						17 pcs. 24' long

(*) 1 pc. 24'0" long was cut to supply S/O 0213 & 0007 both for LP&L.

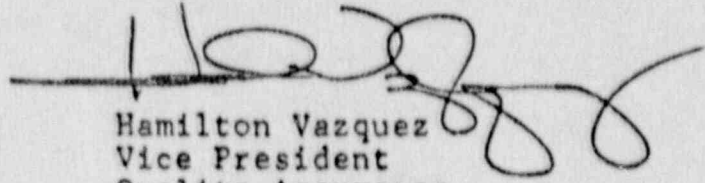
Page 2
Mr. James Batsista
July 17th, 1989

ATTACHMENT "G"

Please let us know if we can be of assistance in connection with any further actions you may need to take concerning this matter.

Sincerely yours,

MEREDITH CORP./PVN STEELS


Hamilton Vazquez
Vice President
Quality Assurance

HV:imf

cc: Mr. Thomas E. Murley
Director, Office of Nuclear Reactor Regulation
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Mr. W. E. Day
Supervisor TC&R-Event Analysis Reporting & Response
Louisiana Power & Light
Waterford 3 SES
P. O. Box B
Killona, LA 70066-0751

Mr. Fred Menkens
President
Pepco
151 Helen Street
South Plainfield, NJ 07080

Mr. F. J. Leach
Manager, Quality Assurance
South Carolina Electric & Gas
P. O. Box 764
Columbia, SC 29218

Mr. James Dailey
Quality Assurance Manager
Dubose Steel
Highway 24 West
Roseboro, NC 28382

VIA FACSIMILE