

UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

In the Matter of )

Philadelphia Electric Company )

(Limerick Generating Station )  
Units 1 and 2) )

Docket Nos. 50-352  
50-353

APPLICANT'S ANSWERS TO  
INTERVENOR AWPP'S FOURTH SET OF  
INTERROGATORIES ON QA/WELDING CONTENTION

DISCOVERY 18  
DECEMBER 28, 1983

8401060357 831228  
PDR ADOCK 05000352  
G PDR

DS03

Interrogatory No. 1

The following log numbers do not have completion dates:  
Please explain what activity was involved and why there is no completion date.

<u>Log Numbers</u>	<u>Issued</u>
M.52.42	9/1/76
52.44	9/1/76
52.45	9/1/83
52.46	10/6/76
52.47	10/8/76
52.50	10/13/76
52.22	4/9/76
52.26	5/6/76
52.27	5/6/76
52.28	5/6/76
52.29	5/7/76
52.39	7/21/76
M.52.3 cool spray	1/6/76
52.4 cool spray	1/9/76
52.5	2/3/76
52.9	3/4/76
52.10	3/4/76
52.14	4/2/76
52.15	4/2/76
52.20	4/7/76
52.16.76	4/24/76
53.17	4/24/76

53.18	4/24/76
53.38	4/14/77
53.40	7/11/77
737 Sp Install Hangers	12/79
P 2.10 through	
745, 753, 725, 726, 727	
731--36	12/79
698, 713, 714, 688, 690	5/18/79
693, 658, 661, 662, 663,	
665, 675, 617-624, 601,	
609, 612-616, 538, 534	
+ many more.	
437 Install Hangers to	10/2/78
432, 413, 374, 335, 273,	
256, 226, 217.	

M.344.2 Attach weld handers 12/20/75

Answer

The attached list describes the inspection, test or work activity for each inspection log number listed in the Interrogatory. Since in many cases the inspection log numbers listed in the Interrogatory were incomplete, Applicant has listed the complete numbers which it believes were referred to in the Interrogatory.

There is no completion date on certain inspection log entries because the inspection activities required for items included in

the scope of that inspection record had not been completed at the time the log was made available. Inspection planning and the scoping of the inspection records started early in the project and is a continuing process. The work is performed in the sequences prescribed by construction schedules, and the final inspections are performed after the work is completed. The completion date is entered after the final inspections that are within the scope of the inspection record are completed.

Participants in Preparation of Answer

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ATTACHMENT DISCOVERY 18

INTERROGATORY I

LOG NUMBER

ACTIVITY INVOLVED

M52-42	Valve & Component Installation
M52-44	Valve & Component Installation
M52-45	Pipe Installation & Rework
M52-46	Installation of Pipe Hangers
M52-47	Pipe Installation & Rework
M52-50	Pipe Installation & Rework
M52-22	Installation of Pipe Hangers
M52-26	Installation of Pipe Hangers
M52-27	Installation of Pipe Hangers
M52-28	Installation of Pipe Hangers
M52-29	Installation of Pipe Hangers
M52-39	Installation of Pipe Hangers
M52-3	Installation of Core Spray Pumps
M52-4	Installation of Core Spray Pumps
M52-5	Attachment Welding of Hangers
M52-9	Installation of Pipe Hangers
M52-10	Installation of Pipe Hangers
M52-14	Pipe Installation & Rework
M52-15	Pipe Installation & Rework
M52-20	Installation of Pipe Hangers
M53-16	Pipe Installation & Rework
M53-17	Pipe Installation & Rework
M53-18	Pipe Installation & Rework
M53-38	Pipe Installation & Rework
M53-40	Pipe Installation & Rework
M90-737	Small Pipe Hanger Installation
M90-738	Small Pipe Hanger Installation
M90-739	Small Pipe Hanger Installation
M90-740	Small Pipe Hanger Installation
M90-741	Small Pipe Hanger Installation
M90-742	Small Pipe Hanger Installation
M90-743	Small Pipe Hanger Installation
M90-744	Small Pipe Hanger Installation
M90-745	Small Pipe Fabrication & Installation
M90-753	Installation Small Pipe Hanger
M90-725	Small Pipe Fabrication & Installation
M90-726	Modification of Hanger
M90-727	Installation Stiffner Plate
M90-731	Small Pipe Hanger Installation
M90-732	Small Pipe Hanger Installation
M90-733	Small Pipe Hanger Installation
M90-734	Small Pipe Hanger Installation
M90-735	Small Pipe Hanger Installation
M90-736	Small Pipe Hanger Installation

<u>LOG NUMBER</u>	<u>ACTIVITY INVOLVED</u>
M90-698	Fabrication of Small Pipe Hanger
M90-713	Small Pipe Fabrication & Installation
M90-714	Small Pipe Fabrication & Installation
M90-688	Small Pipe Hanger Installation
M90-690	Small Pipe Hanger Installation
M90-691	Small Pipe Hanger Installation
M90-692	Small Pipe Hanger Installation
M90-693	Small Pipe Hanger Installation
M90-658	Small Pipe Hanger Installation
M90-661	Small Pipe Hanger Installation
M90-662	Small Pipe Hanger Installation
M90-663	Small Pipe Hanger Installation
M90-665	Small Pipe Hanger Installation
M90-675	Installation of Hangers
M90-617	Modification of Hanger Installation
M90-618	Small Pipe Hanger Installation
M90-619	Small Pipe Hanger Installation
M90-620	Small Pipe Hanger Installation
M90-621	Small Pipe Hanger Installation
M90-622	Small Pipe Hanger Installation
M90-623	Small Pipe Hanger Installation
M90-624	Installation of Pipe Hangers
M90-601	Initial Setting of Rotating Equipment
M90-609	Installation of Shims
M90-612	Small Pipe Hanger Installation
M90-613	Small Pipe Hanger Installation
M90-614	Small Pipe Hanger Installation
M90-615	Small Pipe Hanger Installation
M90-616	Small Pipe Hanger Installation
M90-538	Small Pipe Hanger Installation
M90-534	Installation Small Pipe Hangers
M90-437	Installation Small Pipe Hangers
M90-432	Installation Pipe Hangers
M90-413	Small Pipe Hanger Rework
M90-374	Pipe Rework
M90-335	Small Pipe Fabrication & Rework
M90-273	Small Pipe Hanger Fabrication
M90-256	Small Pipe Hanger Installation
M90-226	Installation Pipe Hangers
M90-217	Pipe Installation & Rework
M344-2	Installation Pipe Hangers
	Attachment Welding of Hangers

Interrogatory No. 2

Please provide the following full NCR's, and questions asked if any. (also indicate meaning of open and closed columns). In each case show documentation as to how dispositioned.

<u>NCR</u>	<u>Issued</u>
3034 out of round	
2980-p-301 welds bypassed	
N. Mallor(?) (no Q.C.)	11/29/77
C-63 2969 to 2973 non	
acceptable welds	11/23/77
2958 P.3 19 HBB 118-1-4	11/14/77
2940 no documentation of	
weld joint.	11/1/77
2888 M91AC incomplete	
weld rod cert.	9/30/77
2864 Discrepancies on B.V.L	
#L8979	9/20/77
2781 PID HB 3 118-H-50	
Welds without documentation	
2835 C-63 inaccessible weld	
FPGW on beam AZD7R	9/1/77
3346 to 3353 Reactor Crane	
parts welding defects,	
Norm;Baron;Gilbert	
How dispositioned?	
3128	3/1/78
3130 Out of round	

3068 C-2 Containment Penetration

Damage

3056

3331 Glanski-Walters

10/4/78

3335 Reactor crane welding

3323 M-16 AC Reactor crane

pts DOH201 doesn't meet spec.

or drawing - How dispositioned?

3320 Weld damage - How dispositioned?

How were following welds damaged?

3308, 3309, 3310, 3311, 3312, 3313,

3314, 3315

3246-7/20/78 P105A Valve NO41 P011A+B

Missing Documentation and Radiograph film

3191 Weld beams-no proper Documentation

or QC surveillance 6/1/78

#### Containment

1475 (send report)

1/15/76

1477 P100A radiographs C-40 for weld #1

1366 Weld at wrong location (who was  
welder how corrected?)

1321

10/9/75

1229 (a) How many P318 rod waste

spools were received? (b) How

many had questionable welds?

(c) How many had been inspected?



How were welds inspected?

Please supply every radiograph that was questioned and indicate how dispositioned.

3421 Lost QC document

How dispositioned?

12/27/78

1125-26 (3/18/75) How was NCR

Dispositioned?

1005-08 Inclusive

1/10/75-1/13/75

705-6 How corrected?

3646 Weld undercut - How dispositioned?

3513

4/4/79

3495 How dispositioned Supply NCR

3462 Supply NCR

3439 Supply NCR

3439 Supply NCR & How

1/10/79

dispositioned

3449 Undersized welds on 19

1/22/79

pipes, 11 reopened

3/2/83

3432 Supply NCR

3709 V Vernon weld misalignment 8/14/79

closed by column-M. Orlando marked

re-opened

3682 Supply NCR - How

dispositioned?

7/25/79

3670 M Baron - How many welds

done before found out?

How was it proven? Were  
any safety related? 7/20/79

995 12/23/74

3917 C-43 12/21/79

3918 Weld not traceable 12/21/79

3890

3892 C-72 Where are radiographs - Who welded  
it? What other welds did he do?

3841

3821

3756 Lack of weld fusion in pipe 9/20/79

3735 How misaligned weld corrected? 9/4/79

3411 Wrong size welds - How 12/13/78  
dispositioned

Please send reports:

1708 5/28/76

1693 5/19/76

1681 5/14/76

1686 5/11/76 why reopened 11/25/77

1648-49 4/26/76 why reopened 5/2/78

16198 Perretti-Full report and 4/13/76

1620 affidavit

1624 P 319-GBB 113 H15 Farretti 4/14/76

16128 Perretti 4/9/76

1613

1527 Send report

1865 How corrected 8/23/76  
1866 What defect - How corrected?  
1856 How corrected - Affidavit R. Lundvall  
1812 How corrected - Affidavit 7/22/76  
J. Quinlan  
1764 How closed - Affidavit 6/24/76  
C. Turley  
1734 Paretti-Want entire report 6/10/76  
1732 Want entire report 6/10/76  
1740 6/11/76  
1726 Need report and why reopened and when closed?  
1730 Need entire report

Answer

Copies of each NCR requested are available for inspection and copying (Discovery 18, Item 2). The disposition of each NCR is documented on the NCR under Block Numbers 20 and 22.

Regarding the additional questions on NCR's, Applicant responds as follows:

NCR

3308 There was no weld damage reported. The NCR reports welding deficiencies identified at receipt inspection.

3309 There is no weld damage reported. The NCR reports bent structural members and misdrilled holes

identified at receipt inspection.

3310 There is no weld damage reported. The NCR reports welding defects identified by nondestructive examination.

3311 There was no weld damage reported. The NCR reports welding deficiencies identified at receipt inspection.

3312 There was no weld damage reported. The NCR reports welding deficiencies identified at receipt inspection.

3313 There was no weld damage reported. The NCR reports welding deficiencies and structural member mislocations identified at receipt inspection.

3314 There is no weld damage reported. The NCR reports damage on the end of a pipe spool that appears to have occurred during handling and shipping, identified at receipt inspection.

3315 There is no weld damage reported. The NCR reports fabrication errors on a pipe spool identified at receipt inspection.

1366 This NCR discusses a mislocated structural

weld on a non-safety related hanger. The hanger has been subsequently deleted as a result of design changes.

1229 The NCR reports nonconforming welding conditions on non safety-related pipe spools identified at receipt inspection. The supplier involved did not supply any safety-related fabricated piping to Limerick.

3670 As stated on the NCR, the weld filler material was issued for one weld joint on a small safety-related pipe. The exact circumstances surrounding the identification of this condition could not be ascertained at this time. The most probable methods are by finding the wrong weld filler material rod in use or by finding that the wrong filler material was issued from a review of the filler material issuance documentation.

3892 The radiographs were taken to verify that the specified welds were used. Since radiographs were not required for acceptance of these welds, the radiographs were not retained. These welds are structural

steel welds, and the AWS D1.1 code does not require traceability of the welder's identity to a particular weld.

1686 The conditions were initially identified on 5/17/76. The NCR was redispositioned as a result of a request by Applicant to Bechtel Power Corp. to further explain the dispositions.

1648-Both of these NCR's were redispositioned  
-49 and revised for the reasons stated on the full copies of the NCR's which have been made available. The NCR's were actually re-closed on 5/2/78.

1726 The NCR was reopened to provide for placing the revision notes on Page 4 of the NCR and was re-closed on 7/18/77.

As to AWPP's request to be provided with every radiograph that was questioned, see Applicant's answer to Interrogatory 3 of Discovery 16.

Participants in Preparation of Answer

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Interrogatory No. 3

We will need all inspection reports signed by V. Ferretti and affidavits that all Ferretti welds re-inspected.

Answer

Copies of inspection records for safety-related items on which this individual's signature or initials appear are available for inspection and copying (Discovery 18, Item 3).

Safety related welds for which this individual performed the final inspections have been re-evaluated and appropriately dispositioned. See Discovery 14, Item 7.

Participants in Preparation of Answer

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COMMONWEALTH OF PENNSYLVANIA :  
 :  
 : ss  
COUNTY OF PHILADELPHIA :

J. S. Kemper, being first sworn, deposes and states:

That he is Vice President of Philadelphia Electric Company, the Applicant herein; that he has read the foregoing Applicant's Answers to Intervenor AWPP's Fourth Set of Interrogatories on QA/Welding and knows the contents thereof; and that the statements and matters set forth therein are true and correct to the best of his knowledge, information and belief.

✓ John S. Kinnel  
Vice President

Subscribed and sworn to  
before me this 20th day  
of December, 1983.

Notary Public

JUDITH Y. FRANKLIN  
Notary Public, Phila., Phila. Co.  
My Commission Expires July 28, 1987