

JAN 25 1977

MEMORANDUM FOR: Ernst Volgenau, Director, IE  
FROM: Thomas J. McTiernan, Director, OIA  
SUBJECT: SURRY UNIT NO. 1 NEUTRON SHIELD TANK

Reference is made to our prior memorandum concerning this subject, dated December 10, 1976, and your reply, dated January 14, 1977. Although our information concerning defective welding related to Unit No. 1, your reply related to Unit No. 2, as well as No. 1. Based upon your reply of January 14, 1977, we have concluded that in the view of your office, as concurred in by NRR, there is no threat to public health and safety by the possible existence of defective welds in the neutron shield tank of Unit No. 1.

We also conclude that welding defects in the tank, were detected and reported by Region II inspectors, including [redacted] and that there is no evidence to support the allegation that an attempt was made to conceal the existence of these defects.

Accordingly, we are closing our file in this matter.

Thomas J. McTiernan, Director  
Office of Inspector and Auditor

DISTRIBUTION:  
OIA subject: 77-4 ✓  
OIA Reading  
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Abston Reading

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CONTACT: William E. Ryan, OIA  
49-27170

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|---------|----------|---------|------------|--|--|
| OFFICE  | OIA      | OIA     | OIA        |  |  |
| SURNAME | RYAN/mlt | GAbston | TMcTiernan |  |  |
| DATE    | 1/ 177   | 1/ 177  | 1/ 177     |  |  |

Attachments:

1. Drawing of AP&L backing strip.
2. CO Rpt. No. 50-313/69-5 (p.3) w/notes
3. Memo fm O'Reilly to Sr. Reactor Inspectors dtd 11/3/69
4. Chicago Bridge & Iron Co. transmittal
5. Varela's notes dtd 3/22-25/70
6. Memo fm Varela to [redacted] dtd 4/10/70 w/attached page for monthly summary reportedly written by [redacted]
7. Varela's draft rpt dtd 12/17/69 (pp. 1, 2, 8-10, 12-18)
8. Memo fm Varela to [redacted] undtd (p. 1 only) w/attached p. 4 of "official rpt by [redacted]"
9. Memo to [redacted] dtd 12/23/69 (p. 1 only) w/notes
10. Varela's draft Feeder Rpt dtd 11/19/69
11. Drawing of welds (2 pp.)
12. Memo to [redacted] dtd 1/23/70 (2 cys of p. 1 only w/various notes)
13. CO Rpt Nos. 50-280/69-8, 50-281/59-8 (p. 7) w/notes
14. CO Rpt Nos. 50-280/70-1, 50-281/70-1 (p. 3) w/notes
15. Pictures of tank w/notes, undtd and attached Form U-1 (back)
16. Pictures of shield w/notes dtd 2/20/70
17. Ltr fm Varela to Volgenau dtd 5/9/77 w/outgoing dtd 4/29/77

(A.10)

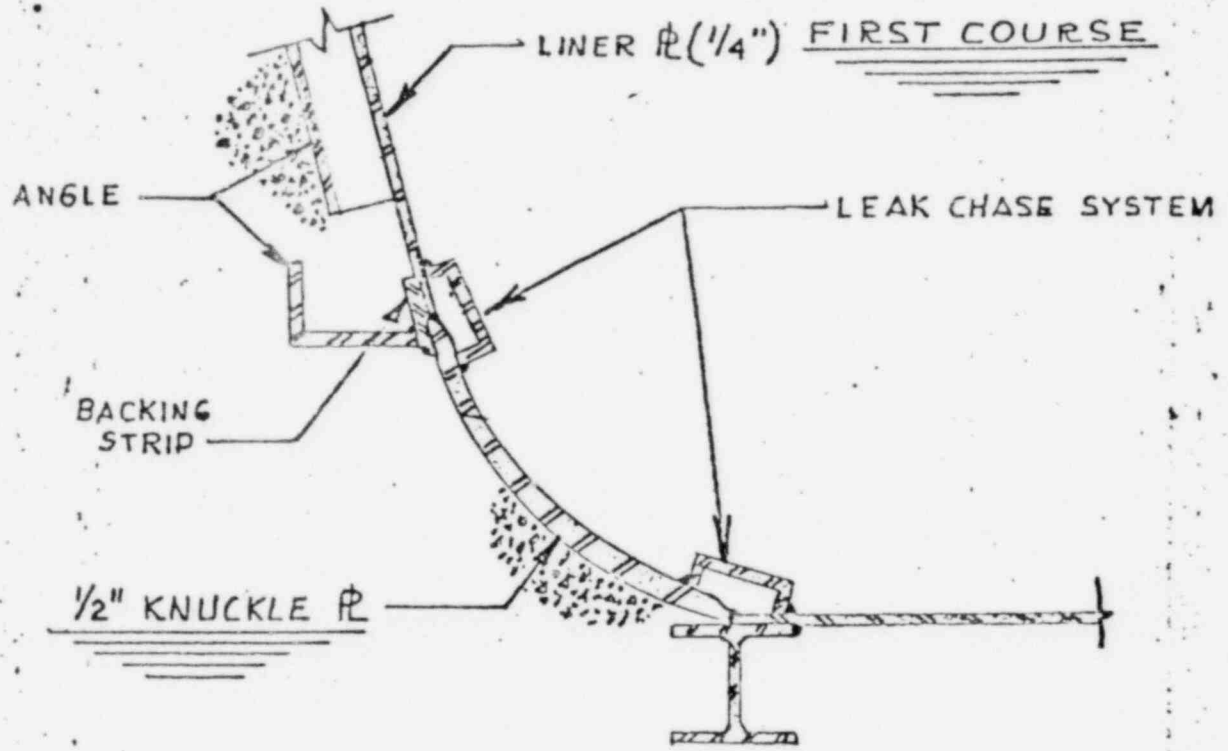
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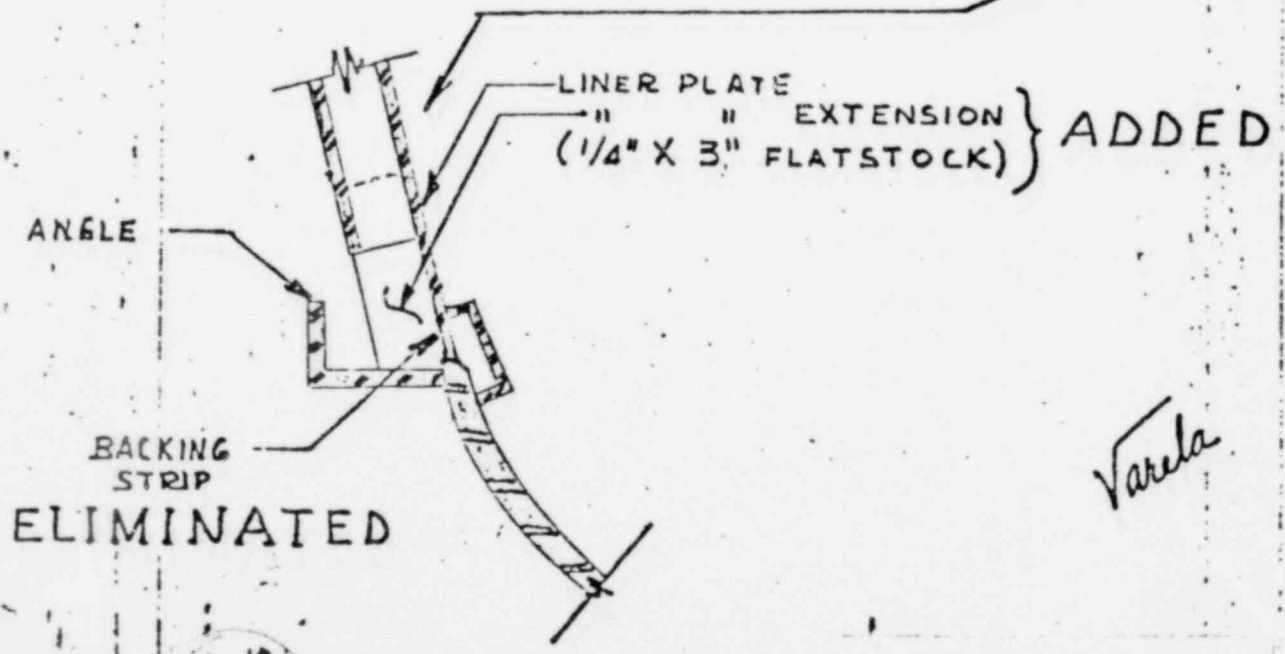
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EXHIBIT B

NO RECORD OF ENGINEERING APPROVAL FOR THE REMOVAL OF THE BACKING STRIP



ABOVE FIGURE 11.2.25-1 IN PSAR - BELOW - AS-BUILT.



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AP&L  
See attached

Supplement No. 14, Section V, was reviewed subsequent to the inspection and does indeed correct the listed nonconformance items. The above nonconformance items are considered resolved at this level.

OPINION B

- 2. The liner assembly joint where the 1/4-inch plate is welded to the 1/2-inch knuckle section does not have a backing strip as shown on Supplement No. 4, Figure 11.2.25-1 of the PSAR. ~~This appears to present no problem to this inspector,~~ but is considered as a deviation from the PSAR only. AP&L states that the discrepancy will be corrected by PSAR supplement as the above items were corrected.

Other Significant Items -

- 1. This inspection finalized the QC inspections of AP&L concreting, 4605.04 and .05. Future inspection efforts will be directed in accordance with PI 3800/2, dated August 20, 1969, Section E.5.f. (See Appendix I.)
- 2. Previous CO:II Report No. 50-313/69-4 stated that concrete design mix for the base slab would be D1, D2. This was in error. The actual mix was as per this report, C1, C2. (See Appendix I.)
- 3. Prestressed concrete tendon sheathing is to be galvanized spiral wound tubing. (See Appendix II.)
- 4. AP&L/Bechtel welding QA/QC was considered to be adequate during this early contact. (See Appendix III.)
- 5. Corrective fitup and welding procedures were absent from Bechtel's welding program, but AP&L has taken the position that corrective qualified procedures and personnel will be on board before that type of work commences. (See Appendix III.)
- 6. Liner plate is not marked as required per ASTM A20. AP&L has taken the position that the plate material will be identified.
- 7. Shop sandblasting and painting of the liner plate assemblies as required by the PSAR were omitted and is contracted to be accomplished onsite. (See Appendix III.)
- 8. No inspection was required of the general surfaces of the liner plate prior to concreting or painting. AP&L has taken a position that inspection will be required and defects repaired. (See Appendix IV.)

too late the work was under way

How will concreted and painted steel be inspected and repaired?

IDENTIFICATION OF THE FABRICATED AND ERECTED PLATE DOES NOT PROVE ITS CHEMISTRY AND CONFORMANCE

This ~~is~~ should be an engineer my evaluation!

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