

EXHIBIT IV - VESSEL FABRICATION AND ASSEMBLYIV.1 DIVISION OF WORK

A significant portion of the vessel fabrication was performed by B&W in their shop facilities at Mt. Vernon, Indiana. This work was in accordance with the ASME code and GE fabrication and quality control requirements. The balance of the fabrication and assembly was performed by CB&I in their shop facilities at Memphis, Tennessee.

IV.2 B&W to CB&I Transfer of Vessel Parts

The condition of the parts and equipment of the Peach Bottom vessel at the time of transfer to CB&I was as described below.

IV.2.1 Condition and Stage of Fabrication for Peach Bottom Unit 2 Reactor Vessel

IV.2.1.1 Piecemark 57 and C1 consisting of the bottom head assembly and No. 1 ring. The entire assembly was complete with nozzles installed, flux monitor penetrations machined, CRD penetrations and sleeves completed and machined, shroud support installed and top machined, jet pump adapter weld preparations machined, skirt and skirt flange welded complete with flange holes drilled, all overlay welding complete, and all non-destructive testing complete. In addition, all furnace sensitized stainless steel safe ends were removed, the nozzle to safe end weld prep machined, re-buttered, and re-machined. The weld preparation for the seam between the No. 1 and No. 2 shell ring was not made.

IV.2.1.2 Piecemark 58 consisting of the No. 2 shell ring complete in one piece, overlay cladding applied, and all non-destructive testing complete. The weld preparation for the seams to both the No. 1 and No. 3 shell rings was not made.

IV.2.1.3 Piecemark 59 and 16 consisting of the No. 3 ring and the "dutchman" were complete with all nozzles installed, safe ends installed, all overlay cladding applied, and all non-destructive testing complete. The weld preparations for the seams to both the No. 2 and No. 4 shell rings were not prepared.

IV.2.1.4 Piecemark 60 and 48 consisting of a complete assembly of the No. 4 shell ring with the vessel flange.

All cladding and back cladding of welds was complete, the weld buildup for the refueling containment skirt was complete, and all non-destructive testing complete. The flange was clad, the ninety-two 6 ft 3/4-in diameter holes pre-bored, the seal surface rough machined, and all non-destructive testing complete. The

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final machining of the stud holes and seal surface, and the installation of all nozzles were not performed. All nozzles to be installed were included and were fabricated, clad, safe ends installed, machined, all non-destructive testing complete, and ready for installation. The weld preparation for attachment of the No. 4 shell ring to the No. 3 shell ring was not made.

IV.2.1.5 Piecemark 201 consisting of the closure-head dome. This item was shaped, quenched, and tempered with non-destructive testing complete. All nozzles were complete and included, but not installed.

IV.2.1.6 Piecemark 202 consisting of the closure head torus. All long seams were welded and all non-destructive testing complete.

IV.2.1.7 Piecemark 209 consisting of the closure head flange. The flange seal surface was clad, the stud holes rough bored and all non-destructive testing complete.

IV.2.1.8 Equipment and Tools (not piecemark items)

1. Ninety-two studs, nuts, bushings, washer sets, and taper pins.
2. Ninety-two bottom inserts, top inserts, and bottoming sleeves.
3. Top head nozzle gaskets, one 4-in weld neck flange, one 4-in blind flange, and two 6-in blind flanges.
4. Thermal sleeves as required for recirculation inlet and feedwater nozzles.
5. Refueling containment skirt, fabricated and machined, ready for welding to the vessel.
6. All brackets and attachments, both internal and external.
7. Two sets of new Inconel "O" rings together with a minimum of fifty "O" ring retainer clips and fasteners.

IV.2.2 Condition and Stage of Fabrication for Peach Bottom  
Unit 3 Reactor Vessel

IV.2.2.1 Piecemark C1

IV.2.2.1.1 MK1, dome, formed to contour, material certified after quench and temper, and all non-destructive testing complete.

IV.2.2.1.2 MK4, lower torus, segments formed and welded, seams blended, and all non-destructive testing complete.

IV.2.2.1.3 MK2, upper torus, segments formed and welded, seams blended, and all non-destructive testing complete.

IV.2.2.1.4 MK24, support skirt transition ring. The ring was shipped as 4 segments, formed, and all non-destructive testing complete.

IV.2.2.1.5 Sufficient material for fabrication of MK40 support skirt, MK41 base ring.

IV.2.2.1.6 MK17, nozzles with safe ends attached, clad, machined, and all non-destructive testing complete.

IV.2.2.1.7 MK101 through 128, CRD stub tube material in sufficient quantity for socket type installation.

IV.2.2.1.8 Shroud support assembly consisting of legs MK51 and 52, ring MK54, baffle plate MK53 all fabricated and welded. All non-destructive testing and machining complete except for machining of final leg length.

IV.2.2.2 Piecemark 57, No. 1 ring formed and welded and all non-destructive testing complete, no cladding or nozzle installation. Safe ends attached to nozzles MK7, 8, and 19. Nozzles clad, machined, and all non-destructive testing complete.

IV.2.2.3 Piecemark 58, No. 2 ring formed and welded and all non-destructive testing complete. Not clad.

IV.2.2.4 Piecemark 59, No. 3 ring, formed and welded and all non-destructive testing complete. No cladding or nozzle installation. Safe ends attached to nozzles MK12 and 13.

Nozzles clad, machined, and all non-destructive testing complete.

IV.2.2.5 Piecemark 16, No. 4 ring formed and welded and all non-destructive testing complete. No cladding or nozzle installation.

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Safe ends attached to nozzles MK10, 11, and 12. Nozzles clad, machined, and all non-destructive testing complete.

IV.2.2.6 Piecemark 60, No. 5 ring formed and welded and all non-destructive testing complete. No cladding or nozzle installation. Safe ends attached to nozzles MK12 and 14. Nozzles clad, machined, and all non-destructive testing complete.

IV.2.2.7 Piecemark 48 vessel flange. Ninety-two stud holes rough bored and all non-destructive testing complete. Not clad.

IV.2.2.8 Piecemark 201

IV.2.2.8.1 Closure head flange MK209

IV.2.2.8.2 Closure head torus segments MK202, formed and all non-destructive testing complete.

IV.2.2.8.3 Closure head dome MK201, formed, O.D. turned, and material certified after quench and temper.

IV.2.2.8.4 Piecemarks 201, 204, 205, 206, and 207. Nozzles with safe ends, machined, and non-destructive testing complete. Lifting lugs, flanges, and gaskets.

IV.2.2.9 Equipment and Tools (not piecemark items)

1. Ninety-two studs, nuts, bushings, washer sets, and taper pins.
2. Ninety-two bottom inserts, top inserts, and bottoming sleeves.
3. Thermal sleeves as required for recirculation inlet and feedwater nozzles.
4. Refueling bellows lower ring segments, upper ring segments, and base ring, formed and all non-destructive testing complete.
5. Nozzle shipping covers for 2296, all brackets and attachments both internal and external for 2297, two sets of new Inconel "O" rings with minimum of 50 "O" ring seal retainer clips and fasteners.

IV.3 Records and Documentation

The following is a list of records and documents delivered by B&W to CB&I.

IV.3.1 Quality Control Records

1. ASME Partial Data Reports (signed by the appropriate Code Inspector).
2. "As-built" drawings of the vessel components.
3. Chemistry of the cladding.
4. Maps of "recordable" ultrasonic indications as detected in shell plates after hot forming.
5. Contract Variation Notices.
6. Chemical and physical properties of materials as shown on Material Test Reports.
7. Thermal history of materials, including certified graphic depiction of furnace charts.

IV.3.2 B&W Reactor Vessel Design Drawings

IV.3.3 B&W Welding Procedures and Specifications

IV.3.4 B&W Non-Destructive Testing Procedures