

LICENSEE EVENT REPORT

EXHIBIT A

CONTROL BLOCK: \_\_\_\_\_ (PLEASE PRINT OR TYPE ALL REQUIRED INFORMATION)

01 | S | C | N | E | E | 3 | 2 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 | 3 | 4 | 1 | 1 | 1 | 1 | 4 | \_\_\_\_\_ | 5  
7 8 9 LICENSEE CODE 14 15 LICENSE NUMBER 25 26 LICENSE TYPE 30 31 CAT 58

CONT  
01 | REPORT SOURCE | X | 6 | 0 | 5 | 0 | 0 | 0 | 2 | 8 | 7 | 7 | 0 | 8 | 0 | 4 | 7 | 8 | 8 | 0 | 8 | 1 | 8 | 7 | 8 | 9  
7 8 9 DOCKET NUMBER 58 59 EVENT DATE 74 75 REPORT DATE 80

EVENT DESCRIPTION AND PROBABLE CONSEQUENCES (10)

02 | The NSSS vendor, as a result of analysis performed on archive weldments,  
03 | discovered that weld filler wire atypical of the submerged arc weld filler  
04 | wires utilized in the construction of the pressure vessel was unknowingly  
05 | mixed by the supplier with a shipment of Mn-Mo-Ni filler wire. The operation  
06 | of the unit is governed by more restrictive pressure-temperature operating  
07 | limits.

09 | SYSTEM CODE | Z | Z | 11 | CAUSE CODE | B | 12 | CAUSE SUBCODE | B | 13 | COMPONENT CODE | V | E | I | S | I | S | E | L | 14 | COMP. SUBCODE | A | 15 | VALVE SUBCODE | Z | 16  
7 8 9 10 11 12 13 14 15 16 17 18 19 20

17 | LER/RO REPORT NUMBER | 7 | 8 | 21 22 | EVENT YEAR | 7 | 8 | 21 22 | SEQUENTIAL REPORT NO. | 0 | 1 | 2 | 24 26 | OCCURRENCE CODE | 0 | 1 | 27 29 | REPORT TYPE | T | 30 | REVISION NO. | 0 | 32  
18 | ACTION TAKEN | X | 33 | FUTURE ACTION | X | 34 | 19 | EFFECT ON PLANT | Z | 20 | SHUTDOWN METHOD | Z | 21 | HOURS | 0 | 0 | 0 | 0 | 37 40 | ATTACHMENT SUBMITTED | Y | 23 | NRC FORM SUB. | N | 24 | PRIME COMP. SUPPLIER | N | 25 | COMPONENT MANUFACTURER | B | 0 | 1 | 5 | 26  
33 34 35 36 37 38 39 40 41 42 43 44 45 46 47

CAUSE DESCRIPTION AND CORRECTIVE ACTIONS (27)

10 | The arc weld filler wire supplier provided the NSSS vendor with wire contain-  
11 | ing an atypical material composition. Unit operation continues with more  
12 | restrictive pressure-temperature limits than in TS in effect.

15 | FACILITY STATUS | E | 28 | % POWER | 1 | 0 | 1 | 0 | 29 | OTHER STATUS | NA | 30 | METHOD OF DISCOVERY | D | 31 | DISCOVERY DESCRIPTION | Notification from NSSS | 32  
7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32

16 | ACTIVITY RELEASED | Z | 33 | CONTENT OF RELEASE | Z | 34 | AMOUNT OF ACTIVITY | NA | 35 | LOCATION OF RELEASE | NA | 36  
7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32

17 | PERSONNEL EXPOSURES NUMBER | 0 | 0 | 0 | 37 | TYPE | Z | 38 | DESCRIPTION | NA | 39  
7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32

18 | PERSONNEL INJURIES NUMBER | 0 | 0 | 0 | 40 | DESCRIPTION | NA | 41  
7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32

19 | LOSS OF OR DAMAGE TO FACILITY TYPE | Z | 42 | DESCRIPTION | NA | 43  
7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32

20 | PUBLICITY ISSUED | Z | 44 | DESCRIPTION | NA | 45  
7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32

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Duke Power Company

Oconee Unit 3

Report No: 50-287/78-12

Report Date: August 18, 1978

Occurrence Date: August 4, 1978

Facility: Oconee Unit 3, Seneca, South Carolina

Identification of Occurrence: Atypical submerged arc weld filler wires utilized in construction of reactor vessel.

Condition Prior to Occurrence: 100% Full Power

Description of Occurrence:

On August 4, 1978, B&W, the Oconee Unit 3 NSSS vendor, informed Duke Power Company that as a result of chemical analyses performed on archive weldments, they had discovered that weld filler wire atypical of the submerged arc weld filler wires utilized in the construction of nuclear pressure vessels was unknowingly mixed by the supplier with a shipment of Mn-Mo-Ni filler wire. The atypical weld wire has high silicon and low nickel contents which are outside of the typical range for the Mn-Mo-Ni filler wire specified by B&W. The nickel content was 0.1% (typically 0.6%) and the silicon content was 1.0% (typically 0.5%). As this atypical material may be present in the Oconee 3 vessel, correspondingly appropriate changes to the heatup and cooldown limits for Unit 3 were prepared by B&W and are implemented at Oconee. These limits are more restrictive than those currently in the Oconee Technical Specifications.

Cause of Occurrence:

B&W's supplier of submerged arc weld filler wire provided weld wire with an atypical material composition which may have been utilized in the construction of the pressure vessel.

Analysis of Occurrence:

There are no directly applicable irradiation data for the atypical weldment although other applicable data exists, and welds of this wire possesses a higher than normal unirradiated reference temperature. Welds prepared from the atypical weld wire exhibit a very adequate Charpy Upper Shelf Energy. This wire mixture (Mn-Mo-Ni filler wire plus the atypical filler wire) may have been used in the construction of the reactor vessel. The weld locations where the wire mixture may have been used are: inlet and outlet nozzles to nozzle belt; upper shell to lower shell; dutchman to lower head. A technical evaluation has been performed by B&W on the reactor vessel assuming the atypical material is in the locations mentioned. This fracture mechanics evaluation has

Analysis of Occurrence (Continued):

demonstrated that the structural integrity of the reactor vessel has not been compromised by the possible presence of the atypical material. However, with the atypical weld material assumed to be present, the operation of the unit is governed by more restrictive pressure-temperature operating limits. These limits are currently in use for Unit 3.

Corrective Action:

Unit 3 operation will continue with the pressure-temperature limits provided by B&W, which are more restrictive than those in the Technical Specifications.