

LICENSEE EVENT REPORT

CONTROL BLOCK: [ ][ ][ ][ ][ ][ ][ ][ ] (1)

(PLEASE PRINT OR TYPE ALL REQUIRED INFORMATION)

[0][1] V A N A S I (2) 0 0 - 0 0 0 0 0 0 - 0 0 (3) 4 1 1 1 1 (4) [ ][ ] (5)

CON'T [0][1] REPORT SOURCE [X] (6) 0 5 0 0 0 3 3 8 (7) 0 3 1 3 8 0 (8) 0 3 2 7 8 0 (9)

EVENT DESCRIPTION AND PROBABLE CONSEQUENCES (10)
[0][2] On March 13, 1980, Westinghouse informed Vepco of a potential for their supplied con-
[0][3] trol rod guide tube support pins, solution heat treated below 1950°F, to break due to
[0][4] stress corrosion cracking. Since a Westinghouse safety evaluation concluded that con-
[0][5] trol rod operation would not be jeopardized by a broken pin for non-Upper Head Injec-
[0][6] tion plants (i.e. North Anna Power Station), the health and safety of the general public
[0][7] are not affected.
[0][8]

[0][9] Z R A (11) B (12) B (13) K K K K K X (14) Z (15) Z (16)
(17) LER/RO REPORT NUMBER 8 0 (21) — (23) 0 3 5 (24) / (27) 9 9 (28) X (30) — (31) 0 (32)
ACTION TAKEN X (18) K (19) EFFECT ON PLANT Z (20) SHUTDOWN METHOD Z (21) HOURS 0 0 0 (22) ATTACHM'T SUBMITTED Y (23) NPD-4 FORM SUB. N (24) PRIME COMP. SUPPLIER N (25) COMPONENT MANUFACTURER W 1 2 0 (26)

CAUSE DESCRIPTION AND CORRECTIVE ACTIONS (27)
[1][0] Certain support pins are susceptible to stress corrosion cracking due to their low
[1][1] solution heat treatment temperature. Corrective actions to be taken are pending the
[1][2] results of a Westinghouse support pin inspection program and their on-going materials
[1][3] test program.
[1][4]

[1][5] E (28) 1 0 0 (29) NA (30) OTHER STATUS D (31) Notification from NSSS (32) DISCOVERY DESCRIPTION
[1][6] Z (33) Z (34) NA (35) AMOUNT OF ACTIVITY NA (36) LOCATION OF RELEASE
[1][7] 0 0 0 (37) Z (38) NA (39) PERSONNEL EXPOSURES
[1][8] 0 0 0 (40) NA (41) PERSONNEL INJURIES
[1][9] Z (42) NA (43) LOSS OF OR DAMAGE TO FACILITY
[2][0] N (44) NA (45) PUBLICITY

NAME OF PREPARER W. R. Cartwright 8004010505 PHONE: (703)894-5151

#### Description of Event

Recent support pin inspections at a foreign plant revealed stress corrosion cracking in Westinghouse supplied control rod guide tube support pins which had been solution heat treated at 1625°F. The potential cracking of the control rod guide tube support pins is considered a generic problem and is being reported for information purposes.

#### Probable Consequences of Occurrence

The purpose of the support pins is to prevent lateral movement of the guide tubes. If a guide tube support pin should break, misalignment of the guide tube could result, which, in turn, could restrict the movement of the associated control rod. Because the safety evaluation performed by Westinghouse concluded that control rod operation is not jeopardized by a broken pin for non-Upper Head Injection plants (i.e. North Anna Power Station) due to the small gap clearance between the non-UHI guide tube and the core plate, the health and safety of the general public are not affected. The support pin cracking problem is generic to Unit 2. As a preventive measure, the support pins in Unit 2 are being replaced with pins having higher solution heat treat temperatures prior to the installation of the upper internals in the reactor vessel.

#### Cause of Event

Certain guide tube support pins are susceptible to stress corrosion cracking because the temperatures at which they were solution heat treated were too low.

#### Immediate Corrective Action

Extensive accelerated corrosion testing has been conducted at Westinghouse R&D Center as a part of the investigation into the support pin cracking problem. This testing has shown that the susceptibility of the support pin to stress corrosion cracking decreases with increasing solution heat treatment temperature and that support pins solution heat treated in the range of 1950°F to 2000°F have little, if any, potential for stress corrosion cracking even under the accelerated testing conditions.

#### Scheduled Corrective Action

In the near future, Westinghouse will conduct ultrasonic inspections at two operating domestic plants of guide tube support pins having solution heat treatment temperatures less than 1800°F. The results of this support pin inspection program as well as the on-going materials test program will determine what further corrective actions, if any, are required.

#### Actions Taken to Prevent Recurrence

No further actions are required.