

LICENSEE EVENT REPORT

POW 28-06-01

UPDATED REPORT - PREVIOUS REPORT DATE 9-16-83

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

0 1 V A S P S 1 2 0 0 - 0 0 0 0 0 - 0 0 3 4 1 1 1 1 4 5
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 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

CONT

0 1 REPORT SOURCE L 6 0 5 0 0 0 2 8 0 7 0 9 0 2 8 1 3 8 0 5 1 0 8 4 9
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 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

EVENT DESCRIPTION AND PROBABLE CONSEQUENCES (10)

0 2 Westinghouse has notified Vepco that the drop rod accident analysis, as presented
0 3 in the UFSAR; may not represent the limiting case. This is being reported per
0 4 T.S.-6.6.2.a.(8). An analysis, using the current fuel cycle parameters, has been
0 5 made and results indicate that the design DNB limit of 1.3 would not be violated.
0 6 Therefore, the health and safety of the public would not be affected.

0 7
0 8
0 9 SYSTEM CODE CAUSE CODE CAUSE SUBCODE COMPONENT CODE COMP. SUBCODE VALVE SUBCODE
Z Z 11 A 12 X 13 Z Z Z Z Z Z 14 Z 15 Z 16
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 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

17 LER/RO REPORT NUMBER 8 3 0 3 7 0 3 X 1
21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

ACTION TAKEN FUTURE ACTION EFFECT ON PLANT SHUTDOWN METHOD HOURS ATTACHMENT SUBMITTED NPD-4 FORM SUB. PRIME COMP. SUPPLIER COMPONENT MANUFACTURER
X 18 X 19 Z 20 Z 21 0 0 0 0 Y 23 N 24 Z 25 Z 9 9
33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

CAUSE DESCRIPTION AND CORRECTIVE ACTIONS (27)

1 0 The most limiting case, with respect to reactivity feedback, was not evaluated in
1 1 the original analysis. For the present fuel cycle, the DNB limits can be maintained
1 2 A detailed evaluation was made which determine that the assumptions of the UFSAR
1 3 remain bounding for all Surry cores.

1 4
1 5 FACILITY STATUS 1 0 0 28 N/A 30 METHOD OF DISCOVERY D 31 Westinghouse Notification 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 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

1 6 ACTIVITY CONTENT RELEASED OF RELEASE AMOUNT OF ACTIVITY 35 LOCATION OF RELEASE 36
Z 33 Z 34 N/A 35 N/A 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 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

1 7 PERSONNEL EXPOSURES NUMBER TYPE DESCRIPTION 39 N/A
0 0 0 37 38 N/A
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 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

1 8 PERSONNEL INJURIES NUMBER DESCRIPTION 41 N/A
0 0 0 40 41 N/A
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 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

1 9 LOSS OF OR DAMAGE TO FACILITY TYPE DESCRIPTION 43 N/A
Z 42 43 N/A
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 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

2 0 PUBLICITY ISSUED DESCRIPTION 45 N/A
N 44 45 N/A
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 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

NAME OF PREPARED J. L. Wilson

PHONE (804) 357-3184

8405170187 840510
PDR ADOCK 05000280
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ATTACHMENT 1

SURRY POWER STATION, UNIT NO. 1 & 2

DOCKET NO: 5 29

REPORT NO: 83-037/03X-1

EVENT DATE: 09-02-83

TITLE OF THE EVENT: POSSIBLE DROP ROD ANALYSIS UNCONSERVATISM

1. Description of the Event

Westinghouse has notified Vepco that the drop rod accident analysis, as presented in the UFSAR, may not represent the limiting case. This is being reported per T.S.-6.6.2.a.(8).

2. Probable Consequences and Status of Redundant Equipment

An evaluation of the impact of the potential unreviewed safety question of a dropped rod on Surry Units 1 and 2, Cycle 7 has been completed by Nuclear Fuel Engineering. The analysis used the conservative assumptions of the minimum beginning of life moderator temperature feedback coefficient, minimum dropped rod worth, and maximum peaking factors associated with the dropped rod. These assumptions maximize core heatup and minimize the DNBR. The DNBR for both units was calculated to be well in excess of the minimum limit of 1.3. The public's health and safety therefore has not and will not be affected during Cycle 7.

3. Cause

The most limiting reactivity feedback value may not have been used in the UFSAR analysis for a dropped rod.

4. Immediate Corrective Action

An analysis of the potential concern was begun.

5. Subsequent Corrective Action

The impact of this concern was evaluated, and it was determined that no problem currently exists at Surry.

6. Action Taken to Prevent Recurrence

A detailed evaluation was made which determined that the current UFSAR drop analysis is the most limiting for all core cycles. This evaluation is documented in NFE Technical Report No. 334.

7. Generic Implications

None.

Vepco

VIRGINIA ELECTRIC AND POWER COMPANY

Surry Power Station
P. O. Box 315
Surry, Virginia 23883

MAY 10 1984

Serial No: 84-020
Docket No: 50-280
License No: 50-281
DPR-32
DPR-37

U.S. Nuclear Regulatory Commission
Document Control Desk
016 Phillips Building
Washington, D. C. 20555

Gentlemen:

Pursuant to Surry Power Station Technical Specifications, the Virginia Electric and Power Company hereby submits the following Licensee Event Report for Surry Unit 1 and 2.

REPORT NUMBER

83-037/03X-1

This report has been reviewed by the Station Nuclear Safety and Operating Committee and will be reviewed by Safety Evaluation and Control.

Very truly yours,

R. J. Saunders

for J. L. Wilson
Station Manager

Enclosure

cc: Mr. James P. O'Reilly
Regional Administrator
Suite 2900
101 Marietta Street, NW
Atlanta, Georgia 30303

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