

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

0 1 P A B V S 1 2 0 0 - 0 0 0 0 - 0 0 3 4 1 1 1 1 4 5
7 8 9 14 15 25 26 30 37 CAT 38

CON'T
0 1 REPORT SOURCE L 6 0 5 0 0 0 3 3 4 7 0 3 2 9 7 9 8 0 8 0 1 7 9 9
7 8 60 61 DOCKET NUMBER 68 69 EVENT DATE 74 75 REPORT DATE 80

EVENT DESCRIPTION AND PROBABLE CONSEQUENCES (10)

0 2 The NSSS Vendor has notified BVPS of a potential for a single dropped control
0 3 rod to lead to calculated DNB ratios lower than reported in the safety analysis.
0 4 This potential inconsistency results because the existing rod controller can
0 5 potentially incorrectly measure the core average power level during certain
0 6 rod drop events. Secondly, is a potential inconsistency between rod control
0 7 settings actually used and those assumed at the time of the safety analysis.

0 8

0 9 SYSTEM CAUSE CAUSE COMPONENT COMP VALVE
CODE CODE SUBCODE CODE SUBCODE SUBCODE
R B 11 B 12 A 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
17 LER/RO EVENT YEAR SEQUENTIAL OCCURRENCE REPORT REVISION
REPORT NUMBER YEAR REPORT NO. CODE TYPE NO.
7 9 0 0 8 0 1 T 1
21 22 23 24 25 26 27 28 29 30 31 32
ACTION FUTURE EFFECT SHUTDOWN HOURS ATTACHMENT NPRD-4 PRIME COMP. COMPONENT
TAKEN ACTION ON PLANT METHOD 22 SUBMITTED FORM SUB. SUPPLIER MANUFACTURER
X 18 Z 19 Z 20 Z 21 0 0 0 0 Y 23 N 24 Z 25 Z 9 9 9 9 26
33 34 35 36 37 38 39 40 41 42 43 44 45 46 47

CAUSE DESCRIPTION AND CORRECTIVE ACTIONS (27)

1 0 A technical specification cahnge has been submitted to revise the negative rate
1 1 trip setpoint from 5 percent in 2 seconds to 3 percent in 1 second. The NIS
1 2 setpoint has been adjusted to these new valves in the interim. The automatic
1 3 rod control system will be operated with the NIS input defeated until the
1 4 Technical Specification change is approved.

1 5 FACILITY % POWER OTHER STATUS METHOD OF DISCOVERY DISCOVERY DESCRIPTION
STATUS 28 0 0 0 29 N/A D 31 Vendor Notification
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
1 6 ACTIVITY CONTENT RELEASED OF RELEASE AMOUNT OF ACTIVITY LOCATION OF RELEASE
2 33 Z 34 N/A 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
1 7 PERSONNEL EXPOSURES NUMBER TYPE DESCRIPTION
0 0 0 37 Z 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
1 8 PERSONNEL INJURIES NUMBER DESCRIPTION
0 0 0 40 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
1 9 LOSS OF OR DAMAGE TO FACILITY TYPE DESCRIPTION
Z 42 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
2 0 PUBLICITY ISSUED DESCRIPTION
N 44 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

7 908130 926

561 221

NRC USE ONLY

Attachment To LER 79-8/01T-1
Beaver Valley Power Station
Duquesne Light Company
Docket No. 50-334

Westinghouse Electric Corporation, the NSS vendor, has notified Beaver Valley Power Station of a potential for a single dropped control rod to lead to calculated DNB ratios lower than reported to the NRC in the safety analysis. The potential inconsistency arises from two sources. First, it has been determined that the existing rod controller for three-loop plants can potentially incorrectly measure the core average power level during certain rod drop events. The second source of nonconservatism is an inconsistency between rod control settings actually used in the field and those assumed at the time of the safety analysis. In the event of a single dropped rod, the automatic rod control system responds to the indicated power reduction by withdrawing control rods to restore steady state power level. If the instrumentation provides a nonconservatively low estimate of the core average power level, then the control system could respond to produce power overshoot.

At BVPS, the rod control system power level signal is input by a single dedicated NIS channel. In the event that a dropped rod is near this dedicated sensor, the sensor will perceive a greater power reduction than representative for the core and may attempt to overcompensate on the subsequent control bank withdrawal. The potential resulting power overshoot could result in calculated violation of the plant DNB limit if the analysis models used at the time of the original safety analysis are used. The safety analysis of the single rod drop event utilizes assumed controller input settings which have an impact on the ability of the rod control system to minimize power overshoot and maximize DNB margins. The use of nonconservatively low values for these settings in SAR analysis resulted in licensing submittals which underestimated the resulting potential power overshoot.

A technical specification change has been submitted to revise the negative rate trip setpoint from 5 percent in 2 seconds to 3 percent in one second. The NIS setpoint has been adjusted to these new values in the interim. The automatic rod control system will be operated with the NIS input defeated until the technical specification change is approved.