

CONTROL BLOCK: 1 2 3 4 5 6 7 8 9 10										(PLEASE PRINT OR TYPE ALL REQUIRED INFORMATION)									
O H D B S 1 2 3 4 5 6 7 8 9 10										O H D B S 1 2 3 4 5 6 7 8 9 10									
L 6 7 8 9 10										L 6 7 8 9 10									
REPORT SOURCE 60 61 62 63 64 65 66 67 68 69										EVENT DATE 74 75 76 77 78 79 80									
EVENT DESCRIPTION AND PROBABLE CONSEQUENCES (10)																			
On 11/30/78, reactor power was raised to the power level cutoff (92%). Xenon "burn-																			
out" continued to insert positive reactivity. Control rods were inserted to their																			
allowable limit and boron injection commenced to add negative reactivity. Power in-																			
creased to approximately 95% and xenon reactivity was declared to be greater than 10%																			
from the equilibrium. The unit was returned to less than 92% power within 15																			
minutes. Chemical analysis indicated no violation of fuel integrity occurred																			
within the core. (NP-33-78-138)																			
<div style="display: flex; justify-content: space-between;"> <div> SYSTEM CODE R C 11 9 10 </div> <div> CAUSE CODE A 12 11 </div> <div> CAUSE SUBCODE A 13 12 </div> <div> COMPONENT CODE Z Z Z Z Z Z 14 13 </div> <div> COMP. SUBCODE Z 15 19 </div> <div> VALVE SUBCODE Z 16 20 </div> </div> <div style="display: flex; justify-content: space-between; margin-top: 5px;"> <div> LER/RO REPORT NUMBER 7 8 21 22 </div> <div> EVENT YEAR 7 8 23 24 </div> <div> SEQUENTIAL REPORT NO. 1 1 8 25 26 </div> <div> OCCURRENCE CODE 0 3 27 28 </div> <div> REPORT TYPE L 29 30 </div> <div> REVISION NO. 0 31 32 </div> </div> <div style="display: flex; justify-content: space-between; margin-top: 5px;"> <div> ACTION TAKEN H 18 33 34 </div> <div> FUTURE ACTION Z 19 35 36 </div> <div> EFFECT ON PLANT Z 20 37 38 </div> <div> SHUTDOWN METHOD Z 21 39 40 </div> <div> HOURS 0 0 0 0 41 42 </div> <div> ATTACHMENT SUBMITTED Y 23 43 44 </div> <div> NPRD-4 FORM SUB. N 24 45 46 </div> <div> PRIME COMP. SUPPLIER Z 25 47 48 </div> <div> COMPONENT MANUFACTURER Z Z Z Z Z 26 49 50 </div> </div>																			
CAUSE DESCRIPTION AND CORRECTIVE ACTIONS (27)																			
The personnel involved failed to adequately anticipate the dynamics of the xenon tran-																			
sient sufficiently in advance to permit proper reactivity control. Upon identification																			
of exceeding the 10% equilibrium xenon requirements, negative reactivity was added																			
until thermal power was within the power level cutoff value. The importance of anti-																			
cipating transient plant responses has been discussed with the personnel involved.																			
<div style="display: flex; justify-content: space-between;"> <div> FACILITY STATUS F 28 9 10 </div> <div> % POWER 0 9 2 29 11 12 </div> <div> OTHER STATUS NA 30 13 14 </div> <div> METHOD OF DISCOVERY A 31 15 16 </div> <div> DISCOVERY DESCRIPTION Operator Observation 32 17 18 </div> </div> <div style="display: flex; justify-content: space-between; margin-top: 5px;"> <div> ACTIVITY CONTENT Z 33 19 20 </div> <div> RELEASED OF RELEASE Z 34 21 22 </div> <div> AMOUNT OF ACTIVITY NA 35 23 24 </div> <div> LOCATION OF RELEASE NA 36 25 26 </div> </div> <div style="display: flex; justify-content: space-between; margin-top: 5px;"> <div> PERSONNEL EXPOSURES NUMBER TYPE DESCRIPTION 39 0 0 0 37 Z 38 NA 27 28 29 30 31 32 </div> </div> <div style="display: flex; justify-content: space-between; margin-top: 5px;"> <div> PERSONNEL INJURIES NUMBER DESCRIPTION 41 0 0 0 40 NA 33 34 35 36 37 38 </div> </div> <div style="display: flex; justify-content: space-between; margin-top: 5px;"> <div> LOSS OF OR DAMAGE TO FACILITY TYPE DESCRIPTION 43 Z 42 NA 39 40 41 42 43 44 </div> </div> <div style="display: flex; justify-content: space-between; margin-top: 5px;"> <div> PUBLCITY ISSUED DESCRIPTION 45 N 44 NA 45 46 47 48 49 50 </div> </div>																			
<div style="display: flex; justify-content: space-between;"> <div> 7901030154 </div> <div> NRC USE ONLY </div> </div> <div style="display: flex; justify-content: space-between; margin-top: 5px;"> <div> Scott Fulmer </div> <div> 419-259-5000, Ext. 276 </div> </div>																			

NRC USE ONLY

419-259-5000, Ext. 276

PHONE:

Scott Fulmer

TOLEDO EDISON COMPANY  
DAVIS-BESSE NUCLEAR POWER STATION UNIT ONE  
SUPPLEMENTAL INFORMATION FOR LER NP-33-78-138

DATE OF OCCURRENCE: November 30, 1978

FACILITY: Davis-Besse Unit 1

IDENTIFICATION OF OCCURRENCE: Power level cutoff exceeded with xenon reactivity and control rods not stabilized.

Conditions Prior to Occurrence: The unit was in Mode 1, with Power (MWT) = 2600, and Load (MWE) = 820.

Description of Occurrence: On November 30, 1978, at approximately 0700 hours during an up power maneuver, reactor thermal power was raised to 92% (power level cutoff). The accompanying xenon "burnout" from the up power maneuver continued to insert positive reactivity which was compensated for by inserting control rods and boron injection into the Reactor Coolant System. At approximately 0753 hours on November 30, 1978, the control rods reached their allowable insertion limit and thermal power increased to approximately 95%. At approximately 0815 hours on November 30, 1978, xenon reactivity was declared to be greater than 10% from the equilibrium value for rated thermal power. This placed the unit in the Action Statement of Technical Specification 3.1.3.8, which requires thermal power be maintained below the power cutoff until xenon reactivity or control rod reactivity has stabilized.

The continued injection of boron into the Reactor Coolant System permitted reduction of thermal power to less than 92% at approximately 0830 hours. This removed the unit from the Action Statement of Technical Specification 3.1.3.8.

Designation of Apparent Cause of Occurrence: The cause of this occurrence is attributed to personnel error. The personnel involved failed to adequately anticipate the dynamics of the xenon transient associated with the increase in power. As a result, the relatively slow process of Reactor Coolant System boron injection was not initiated sufficiently in advance to permit proper reactivity control at the desired 92% level.

Analysis of Occurrence: There was no threat to the health and safety of the public or to unit personnel. The unit was returned to less than 92% thermal power within approximately 15 minutes from the time xenon equilibrium conditions were declared to be in excess of the 10% equilibrium limit. Additionally, chemical analysis indicates no violation of fuel integrity occurred within the core.

Corrective Action: Upon identification of exceeding the 10% equilibrium xenon requirements boron injection was used to add negative reactivity and control rods were maintained at the insertion limit until thermal power was reduced to within the power level cutoff value.

The importance of maintaining proper plant control, particularly in anticipating transient plant responses, has been discussed with the personnel involved.

Failure Data: There have been no previous incidents involving the power level cutoff being exceeded.

LER #78-118